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ECONOMIC INDICATORS

Research Department, First Hawaiian Bank | March/April 1986

Hawaii's Growing Japanese Visitor Market

A unique combination of circumstances has stirred optimism regarding the Japanese travel market to Hawaii. One factor is the enormous size of Japan's current trade surplus with the United States, which puts pressure on the Japanese government to encourage tourism, since overseas spending by Japanese travelers is regarded as a form of trade-surplus reduction. Such an increase could easily be supported by the Japanese economy, which is forecast to grow by 3.7 percent this year. Japanese consumers are also expected to enjoy rising incomes, and be more liberal in their spending.

United Airline's recent acquisition of Pan American's former routes to Japan and other Asian destinations should intensify competition for Japan-Hawaii traffic. Already, Japan Air Lines, the world's largest international airline, has announced plans to expand its fleet to compete more efficiently with United Airlines.

The most far-reaching development is the deregulation of Japanese air travel, resulting from an agreement between Japan and the U.S. that was reached last April. Under this agreement, three more trans-Pacific routes will be opened to U.S. carriers. In the past, the Japanese government allowed only the government-supported Japan Air Lines to fly on international routes. JAL's major domestic rivals, All Nippon Airways and Toa Domestic Airlines, will be entering the trans-Pacific travel market, while another JAL competitor, Nippon Cargo Airlines, is already carrying freight to the U.S. The agreement also allows international airline access to regional Japanese cities other than Tokyo, thereby further widening access for Japanese domestic travelers to the international travel market.

Japanese visitors to Hawaii are projected to grow to 1.6 million visitors annually by the year 2005. As a result, the Japanese share of the total visitor market is expected to increase to 20 percent from the 17 percent share of Hawaii's visitor market that it now represents.

In terms of spending, the Japanese visitor spends roughly $230 per day compared to $90 per day for the average non-Japanese visitor. Last year, Japanese visitors spent an estimated $1 billion in Hawaii.

Our perceptions of the typical Japanese visitor are also in for a change. At present, 85 percent of visitors come in tour groups, and over half are in their 20's. Nearly a third are honeymooners. Roughly two out of five visit the Neighbor Islands. Of those, more than half go to Maui, 34 percent go to Kauai, and 9 percent go to the Big Island.

The new emerging market segments identified by Japanese tour operators include students, who travel on annual excursions and who would take advantage of expanded air travel opportunities to take longer trips. Young, single females, middle-aged couples and women traveling together are also traveling more. As Japan's population ages, elderly travelers will increase in number. Japanese "yuppies," young urban professionals, are establishing their own short-term tour market. Generally, group tours are gradually giving way to free independent travelers. As deregulation brings improved air connections to less-populated areas, we may also see more rural travelers making the long journey to our islands.

Japanese visitors to Hawaii will become much more diverse, spanning a broader range of ages, interests, and travel budgets. They are becoming more price and quality conscious. These trends mean substantial adjustments for the local community and visitor-related businesses.

For example, delays in processing international visitors through U.S. Customs should be reduced through airport facility improvements, pre-clearance processing, and more customs inspectors. As more Japanese visitors travel independently, there will be higher demand for services such as car rentals, and specialized forms of recreation. Language barriers must be overcome; building signs, restaurant menus, and service personnel need to be bilingual. Japanese customs and attitudes need to be better understood. Crime and pornography should be kept in check. Further, as Japanese visitors become more sophisticated, and alternate destinations more competitive, efforts to attract Japanese visitors need to be increased.

Elimination of visa requirements for Japanese citizens would undoubtedly enhance the flow of Japanese visitors to Hawaii. Japan already has a number of reciprocal visa-exemption agreements with Canada and a number of European countries. Similar agreements between the U.S. and Japan would eliminate the time and effort individual travelers and travel agents expend to come to Hawaii.

Most importantly, as Japanese visitors become increasingly evident in Hawaii, it is our responsibility as a community to welcome them with the human warmth, courtesy, and friendliness that is the hallmark of our Aloha Spirit, and the one characteristic of our people most admired by visitors.

Hawaii's Japanese visitor market is a large market well worth cultivating. It rescued our visitor industry when the westbound visitor market was crippled in 1980, 1981, and again last year. As we pursue efforts to diversify our economy, we should also support the development of the Japanese visitor market as an important means to expand and stabilize our number-one industry.

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MARCH/APRIL FEATURE STORY: REAL ESTATE IN HAWAII

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CURRENT BUSINESS TRENDS

February is typically a good month for the visitor industry, however, stimulated by cheaper airfares, this year, it was better than usual. Statistics for February showed that 455,780 travelers came to Hawaii, a substantial 7 percent over-the-year increase. Westbound tourists (from the Mainland, Europe, and Canada) totaled 346,360, up a significant 8 percent over the previous February. Eastbound tourists (from Asia and Oceania) totaled 99,420, representing a more modest 4 percent gain over February of the previous year.

When comparing over-the-year growth, February, 1986 showed the best improvement in the last 13 months. Last year, low growth followed by the United Airlines strike led to minimal or negative changes in monthly visitor arrivals. In contrast, the data so far in 1986 suggested that the industry has recovered from the effects of the strike.

Visitor counts on the neighbor island showed dramatically different patterns so far this year. At one end, Maui's arrivals were down by 1 percent, when comparing the first two months of 1985 and 1986. At the other end of the spectrum, Kauai's arrivals were up 13 percent during the same period. And about half way between the two extremes, the Big Island reported a six-percent increase for the January-February period.

Statewide, hotel occupancy in January was slightly below last year's level. The proportion of the hotel units rented fell from 84 percent in January, 1985, to 82 percent in 1986.

The pattern was far from uniform across the islands. Oahu's occupancy dropped from 92 to 84 percent, between January of 1985 and 1986. Maui's rate remained relatively constant, going from 82 to 83 percent over the year. Rates on the Big Island showed a more substantial improvement, increasing from 64 to 68 percent. And, Kauai's occupancy shot up from 65 to 84 percent, reflecting the impact of the huge gain in visitor arrivals during January.

u. s. economic indicators

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
GROSS NATIONAL PRODUCT**					
In Current Dollars	bil. $	4th Qtr.	4,062r	1.1	5.4
In 1982 Dollars	bil. $	4th Qtr.	3,594r	0.3	2.2
PERSONAL INCOME**	bil. $	January	3,383p	−0.1	5.2
AVERAGE PRIME RATE	percent	February	9.50	0.0	−9.5
CONSTRUCTION					
CONSTRUCTION PUT IN PLACE**	bil. $	December	354.6p	2.8	14.4
CONSTRUCTION COST INDEXES:					
Residences	1967 = 100	November	371.3	0.3¹	2.2
Apts, Hotels, Office Bldgs	1967 = 100	November	369.1	0.3¹	1.5
EMPLOYMENT					
CIVILIAN EMPLOYMENT*	thous.	January	108,955	0.7	−5.1
UNEMPLOYMENT*	thous.	January	7,831	−2.4	−7.2
UNEMPLOYMENT RATE*	percent	January	6.7	−2.9	−9.5
PRICES					
CONSUMER PRICE INDEXES:					
Wage Earners and Clerical Workers	1967 = 100	February	323.3	−0.3	3.0
All Urban Consumers	1967 = 100	February	327.5	−0.3	3.2
PRODUCER PRICE INDEXES:					
Finished Goods*	1967 = 100	January	296.3p	−0.7	1.5
All Commodities	1967 = 100	January	309.0p	−0.4	−0.2

p = preliminary. ¹Compared to September, 1985. *Seasonally adjusted. **Seasonally adjusted at annual rates.

business activity in hawaii

BUSINESS SALES					
GROSS BUSINESS RECEIPTS:					
STATE	mil. $	January	2,305.9	.....	4.1
Oahu	mil. $	January	1,949.7	.....	4.0
Maui County	mil. $	January	149.9	.....	0.1
Hawaii	mil. $	January	154.9	.....	4.1
Kauai	mil. $	January	51.4	.....	21.9
DIVERSIFIED MANUFACTURING	mil. $	January	43.5	.....	11.2
DIVERSIFIED AGRICULTURE	mil. $	January	27.0	.....	8.2
RETAILING	mil. $	January	906.7	.....	12.8
WHOLESALING	mil. $	January	543.3	.....	−11.7
SERVICES	mil. $	January	506.5	.....	−1.1
OAHU NEW CAR SALES	number	January	3,070p	.....	−8.8
HONOLULU PRICES					
HONOLULU CONSUMER PRICE INDEX:					
Wage Earners and Clerical Workers	1967 = 100	February	308.5	0.9¹	2.7
All Urban Consumers	1967 = 100	February	301.2	0.9¹	2.9
TOURISM					
VISITOR EXPENDITURES	mil. $	1984	4,582p	.....	15.3
OVERNIGHT OR LONGER VISITORS	number	February	445,780p	2.7	7.4
	number	Jan.-Feb.	879,860p	.....	5.1
Westbound	number	February	346,360p	2.2	8.4
	number	Jan.-Feb.	685,210p	.....	6.8
Eastbound	number	February	99,420p	4.4	4.2
	number	Jan.-Feb.	194,650p	.....	−0.2
AVERAGE DAILY VISITOR CENSUS	number	Jan.-Feb.	127,500p	.....	6.2
AVERAGE LENGTH OF STAY	no. of days	Jan.-Feb.	11.0p	.....	−0.9
MEETING ATTENDANCE	number	January	25,791	.....	−10.3
ORGANIZED GROUP TOURS	number	Jan.-Feb.	156,120p	.....	−3.5
VISITOR COUNT BY COUNTY¹					
Oahu	number	February	251,680p	2.8	6.8
	number	Jan.-Feb.	496,480p	.....	4.0
Maui County	number	February	170,240p	9.2	1.9
	number	Jan.-Feb.	326,070p	.....	−1.3
Hawaii	number	February	72,650p	4.7	6.5
	number	Jan.-Feb.	142,040p	.....	6.2
Kauai	number	February	82,750p	8.3	9.5
	number	Jan.-Feb.	159,180p	.....	13.0

p = preliminary. ¹Compared to December, 1985.

business activity in hawaii [cont.]

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
VISITOR ACCOMMODATIONS:					
STATE	number	Feb., 1985	65,919	.....	5.6
Oahu	number	Feb., 1985	38,600	.....	4.8
Waikiki	number	Feb., 1985	33,879	.....	5.1
Maui (Island)	number	Feb., 1985	13,515	.....	8.1
Molokai	number	Feb., 1985	627	.....	0.0
Lanai	number	Feb., 1985	10	.....	−16.7
Hawaii	number	Feb., 1985	7,511	.....	5.1
Kauai	number	Feb., 1985	5,656	.....	6.5
HOTEL OCCUPANCY:					
STATE	percent	January	81.8p	21.4	−2.6
Oahu	percent	January	84.1p	12.0	−8.5
Maui (Island)	percent	January	83.1p	25.3	1.1
Hawaii	percent	January	68.3p	34.4	6.1
Kauai	percent	January	84.0p	68.0	29.2
DEFENSE EXPENDITURES					
APPROPRIATED FUNDS TOTAL	mil. $	Yr. to 4th Qtr.	2,041.0	.....	4.6
Military Payroll	mil. $	Yr. to 4th Qtr.	835.8	.....	−0.2
Civilian Payroll	mil. $	Yr. to 4th Qtr.	627.5	.....	4.3
Local Purchases	mil. $	Yr. to 4th Qtr.	577.7	.....	13.0
SUGAR					
VALUE OF CROP SALES (Unprocessed Cane)	mil. $	1984	256.2	.....	−4.0
SUGAR PRODUCTION	thous. tons	January	9.4	.....	−4.8
AVERAGE N. Y. RAW SUGAR PRICE	$/ton	January	410.8	.....	−0.9
PINEAPPLE					
VALUE OF CROP SALES (Fresh Equivalent)	thous. $	1985	90.1	.....	0.2
SHIPMENTS: CANNED[2]	thous. $	January	7,012	.....	−43.8
FRESH	thous. lbs.	January	16,882	.....	−16.9
DIVERSIFIED AGRICULTURE					
CROPS	thous. $	1984	120,756	.....	5.3
FLOWERS & NURSERY PRODUCTS	thous. $	1984	42,905	.....	18.6
Anthurium Outshipments[3]	th. dozens	January	119.1	.....	17.8
Potted Foliage Plants	thous. $	1984	14,050	.....	29.7
FRUITS & NUTS	thous. $	1984	39,749	.....	3.2
Papaya Sales	th. lbs.	January	3,760	25.1	1.6
Average Farm Price	cents/lb.	January	22.0	15.8	36.6
Macadamia Nut Sales (in shell)	th. lbs.	1985	37,000	.....	−1.9
Average Farm Price	cents/lb.	1985	70.0	.....	1.2
VEGETABLES AND MELONS[4]	th. lbs.	January	4,530	.....	−1.8
LIVESTOCK	thous. $	1984	87,025	.....	0.6
BEEF PRODUCTION (Dressed Wt.)	th. lbs.	January	3,316	.....	21.6
Average Farm Price (Feedlot Beef)	cents/lb.	January	86.5	0.6	−1.1
HOG PRODUCTION (Dressed Wt.)	th. lbs.	January	501	.....	6.6
Average Farm Price	cents/lb.	January	104.5	0.5	0.5
MILK PRODUCTION	mil. lbs.	January	13.1	5.6	9.2
Average Price Sold to Plants	$/100 lbs.	January	20.25	−0.2	−2.0
EGG PRODUCTION	mil.	January	19.3	.....	−90.0
Average Farm Price	cents/doz.	January	76.0	4.1	−12.6
PUBLIC UTILITIES					
ELECTRICITY GENERATED	mil. kwh.	January	601.4	.0	4.9
GAS SALES	th. therms.	January	4,134	2.4	−1.3
TELEPHONE LINES IN SERVICE	thous.	January	467.1	0.5	1.6

p = preliminary.
[2]Gross taxable income valued at time of shipment.
[3]From Hawaii County.
[4]Includes snap beans, cabbage, celery, sweet corn, cucumbers, lettuce, onions, green peppers, tomatoes, and watermelons.

While the statewide occupancy figures decreased, the rates hotels charged for these rooms increased. The average daily room rate went from $71 in January, 1985 to $79 in January, 1986, a 12-percent jump. Kauai's room rates were the only ones to show a drop, from $72 to $66 between January of 1985 and 1986. This, in part, probably contributed to Kauai's recent dramatic growth in visitor counts. Maui's room rates, already the highest in the state, climbed even higher over the year, from $107 to $120.

The construction industry was also off to a good year, according to building permit data, which functions as a general indicator of future construction activity. The value of nonresidential permits on Kauai showed a spectacular over-the-year jump of 4,929 percent in January. Nonresidential permits issued during the month of January, 1986, alone, were greater than the annual totals for 1984 and 1985 combined. The giant gain was due to almost $32 million in permits awarded to Chris Hemmeter for the Kauai Surf renovations.

Though nowhere near Kauai's exceptional record, Oahu also was off to a good start in January. The value of residential permits was $45.5 million, a substantial 152-percent gain over January, 1985. Nonresidential permits logged a more modest 10-percent increase. Reporting problems on Maui have delayed compilation of the Maui data, so no current information is available for that county or for the state total.

Labor force statistics showed the usual first-of-the-year downturn. Unemployment jumped from 5.1 percent in December to 5.9 percent in January. However, in spite of the increase, this still represented a slight improvement from a year ago: the jobless made up 6.1 percent of the labor force in January, 1985. And, Hawaii still had one of the lowest unemployment rates in the nation, coming in almost a full percentage point below the U.S. average of 6.7 percent.

The seasonal drop in labor force statistics in Hawaii was largely due to post-holiday layoffs in the retail trades. Thousands of temporary workers, hired for the holiday rush, were let go in January. About 2,300 jobs were cut in the retail trades, accounting for a majority of January's job losses. To a lesser degree, the pineapple industry also had seasonal layoffs, falling by 400 jobs. And, closing of the Maui and Kauai Surf resorts for renovations led to fewer hotel jobs in January.

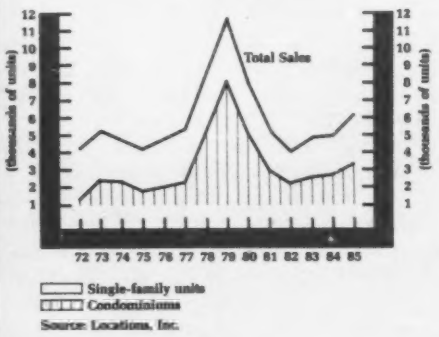
The only areas to show any substantive growth during the month were the other services (those excluding hotels)

which added almost 700 jobs, and state government which also added 700 positions. The bulk of the additional government jobs were in the Department of Education which hired coaches, substitute teachers, and hourly workers for the new academic semester.

REAL ESTATE IN HAWAII

Real estate sales are again gaining momentum after a four-year slump (see Figure 1). From 1978 to 1980 both single family homes and condominiums enjoyed dramatic sales volume, with resales of existing units averaging 9,300 sales per year. In contrast, during the slump that followed, sales dropped by half. Between 1981 and 1984, single family and condominium purchases averaged 4,800 per year.

FIGURE 1
MLS SALES OF SINGLE-FAMILY UNITS AND CONDOMINIUMS
STATE OF HAWAII
1972-1985



Source: Locations, Inc.

1985 appears to have marked the recovery of the local real estate market. The sale of existing residential units jumped to 6,200 statewide. This represents an impressive 24 percent improvement over 1984, and the best growth year since 1979.

Two major factors contributed to the return of the home buyer to the marketplace. First is the decline in interest rates. There is an inverse relationship between mortgage rates and sales; as interest rates rise, sales drop (see Figure 2). During 1982, the effective mortgage rate (which includes initial fees and charges) hit an annual high of 14.7 percent. Simultaneously, statewide sales hit a new low of 4,000 units. In the following years, as the effective mortgage rate inched downward, the real estate market picked up.

According to the Federal Home Loan Bank Board's monthly survey of mortgage financing, the conventional mortgage rate for Honolulu for 1985 was 12.0 percent, the lowest in 6 years.

business activity in hawaii [cont.]

Series		Unit	Period	Number	Percent Change preceding period	Percent Change year ago
CONSTRUCTION PUT IN PLACE						
STATE:		thous. $	January	142,188	.....	66.8
Oahu		thous. $	January	124,452	.....	71.3
Maui County		thous. $	January	7,964	.....	86.1
Hawaii		thous. $	January	7,452	.....	18.2
Kauai		thous. $	January	2,320	.....	15.4
HONOLULU CONSTRUCTION COST INDEXES						
SINGLE FAMILY		1967=100	February	364.7	−0.1	3.6
HIGH-RISE		1967=100	February	382.3	−0.2	3.5
PRIVATE PERMITS AUTHORIZED						
STATE:	RESIDENTIAL	thous. $	Jan.-Dec. 85	566,033	.....	48.2
	Single Family Units	number	Jan.-Dec. 85	4,741	.....	14.7
	Multiple Family Units	number	Jan.-Dec. 85	2,556	.....	104.5
	NONRESIDENTIAL	thous. $	Jan.-Dec. 85	323,256	.....	65.1
OAHU:	RESIDENTIAL	thous. $	Jan. 1986	45,476	.....	152.0
	Single Family Units	number	Jan. 1986	106	.....	24.7
	Multiple Family Units	number	Jan. 1986	476	.....	255.2
	NONRESIDENTIAL	thous. $	Jan. 1986	16,647	.....	10.3
MAUI CO.:	RESIDENTIAL	thous. $	Jan.-Dec. 85	145,915	.....	256.9
	Single Family Units	number	Jan.-Dec. 85	984	.....	54.2
	Multiple Family Units	number	Jan.-Dec. 85	457	.....	7,516.7
	NONRESIDENTIAL	thous. $	Jan.-Dec. 85	32,718	.....	72.6
HAWAII:	RESIDENTIAL	thous. $	Jan. 1986	3,779	.....	−4.6
	Single Family Units	number	Jan. 1986	74	.....	1.4
	Multiple Family Units	number	Jan. 1986	0	.....	−100.0
	NONRESIDENTIAL	thous. $	Jan. 1986	822	.....	−85.6
KAUAI:	RESIDENTIAL	thous. $	Jan. 1986	1,750	.....	−76.5
	Single Family Units	number	Jan. 1986	21	.....	−41.7
	Multiple Family Units	number	Jan. 1986	0	.....	−100.0
	NONRESIDENTIAL	thous. $	Jan. 1986	32,490	.....	4,929.4
PUBLIC CONTRACTS AWARDED						
TOTAL GOVERNMENT PROJECTS:						
STATE		thous. $	Jan.-Feb.	43,257	.....	−5.1
Oahu		thous. $	Jan.-Feb.	30,284	.....	1.8
Maui County		thous. $	Jan.-Feb.	7,178	.....	−40.8
Hawaii		thous. $	Jan.-Feb.	4,276	.....	41.4
Kauai		thous. $	Jan.-Feb.	1,521	.....	121.7
BY LEVEL OF GOVERNMENT:						
Federal		thous. $	Jan.-Feb.	4,187	.....	0.7
State		thous. $	Jan.-Feb.	25,227	.....	381.4
County		thous. $	Jan.-Feb.	13,843	.....	−61.7
REAL ESTATE RESALES						
STATE:	Single Family	number	January	245	.....	102.5
	Average Price	dollars	January	155,662	.....	−8.6
	Condominium	number	January	299	.....	86.9
	Average Price	dollars	January	110,175	.....	6.7
OAHU:	Single Family	number	January	148	.....	68.2
	Average Price	dollars	January	179,490	.....	−5.0
	Condominium	number	January	215	.....	70.6
	Average Price	dollars	January	107,610	.....	11.7
MAUI CO.:	Single Family	number	January	48	.....	300.0
	Average Price	dollars	January	138,880	.....	−17.7
	Condominium	number	January	72	.....	157.1
	Average Price	dollars	January	124,230	.....	−9.1
HAWAII:	Single Family	number	January	37	.....	146.7
	Average Price	dollars	January	93,050	.....	21.1
	Condominium	number	January	6	.....	50.0
	Average Price	dollars	January	77,000	.....	−7.5
KAUAI:	Single Family	number	January	12	.....	100.0
	Average Price	dollars	January	121,960	.....	−8.7
	Condominium	number	January	6	.....	200.0
	Average Price	dollars	January	66,580	.....	−40.6

p = preliminary.

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population in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
POPULATION					
STATE:					
Total De Facto Population	thous.	July 1, 1985	1,149.9p	.....	0.9
Total Resident Population	thous.	July 1, 1985	1,053.9p	.....	1.6
OAHU:					
Total De Facto Population	thous.	July 1, 1984	859.8p	.....	1.5
Total Resident Population	thous.	July 1, 1984	805.3p	.....	1.6
MAUI COUNTY:					
Total De Facto Population	thous.	July 1, 1984	114.5p	.....	10.3
Total Resident Population	thous.	July 1, 1984	83.1p	.....	4.0
HAWAII:					
Total De Facto Population	thous.	July 1, 1984	112.5p	.....	1.7
Total Resident Population	thous.	July 1, 1984	106.4p	.....	3.4
KAUAI:					
Total De Facto Population	thous.	July 1, 1984	54.4p	.....	7.3
Total Resident Population	thous.	July 1, 1984	44.0p	.....	2.1
CIVILIAN RESIDENT POPULATION:					
STATE	thous.	July 1, 1984	981.9p	.....	2.0
MILITARY PERSONNEL:					
STATE	number	July 1, 1985	58,005	.....	−4.6
Ashore	number	July 1, 1985	53,848	.....	−4.4
Afloat	number	July 1, 1985	4,157	.....	−7.3
CIVILIAN MILITARY DEPENDENTS	number	July 1, 1985	64,281	.....	−4.2
FOREIGN IMMIGRATION[1]	number	Jan.-Feb.	776	.....	−22.3

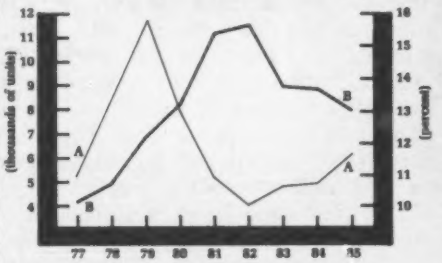
p = preliminary.
[1]Includes only those entering Honolulu ports and do not include status changes.

income in hawaii

INCOME					
TOTAL PERSONAL INCOME**	mil. $	3rd Qtr.	14,390p	1.1	5.2
EMPLOYMENT INCOME[2]	mil. $	3rd Qtr.	10,502p	1.3	6.3
Manufacturing	mil. $	3rd Qtr.	511p	3.0	15.3
Construction & Mining	mil. $	3rd Qtr.	574p	1.1	13.4
Wholesale	mil. $	3rd Qtr.	445p	0.9	6.0
Retail	mil. $	3rd Qtr.	1,179p	0.2	5.1
Finance, Ins., & Real Estate	mil. $	3rd Qtr.	700p	1.7	3.1
Trans., Comm., & Util.	mil. $	3rd Qtr.	936p	2.3	7.2
Services	mil. $	3rd Qtr.	2,371p	1.4	6.3
Farm & Other	mil. $	3rd Qtr.	345p	−2.5	−1.7
Federal Civilian	mil. $	3rd Qtr.	978p	−0.2	6.0
Federal Military	mil. $	3rd Qtr.	1,276p	0.7	3.8
State & Local	mil. $	3rd Qtr.	1,186p	3.4	7.1
PROPERTY INCOME (Dividends, Interest, & Rent)	mil. $	3rd Qtr.	2,712p	0.5	2.6
TRANSFER PAYMENTS (1,867) minus Personal Contributions for Social Insurance (706)	mil. $	3rd Qtr.	1,177p	1.6	1.5
PER CAPITA PERSONAL INCOME:					
STATE	dollars	1984	13,042p	.....	5.6
Oahu	dollars	1983	12,697p	.....	4.9
Maui County	dollars	1983	10,963p	.....	3.4
Hawaii	dollars	1983	9,396p	.....	3.1
Kauai	dollars	1983	9,867p	.....	2.7

**Total personal income and all components are seasonally adjusted at annual rates.
[2]Includes wage and salary disbursements, proprietors' income, and other labor income.
p = preliminary.

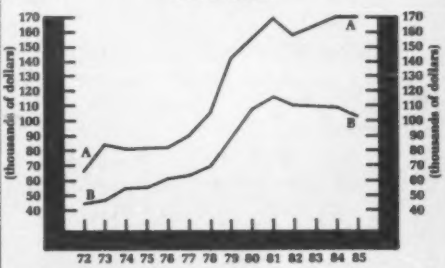
FIGURE 2
MLS SALES AND AVERAGE EFFECTIVE MORTGAGE RATE
STATE OF HAWAII
1977-1985



A. Total MLS Sales (left-hand scale)
B. Average Effective Mortgage Rate (right-hand scale)
Source: Locations, Inc.; Federal Home Loan Bank Board

Prices are the second major factor affecting sales volume. According to Locations, Inc., prices for existing single family homes and condominiums have stabilized since 1981 (see Figure 3).

FIGURE 3
MLS PRICES FOR SINGLE-FAMILY UNITS AND CONDOMINIUMS
STATE OF HAWAII
1972-1985



A. Single-family unit prices
B. Condominium prices
Source: Locations, Inc.

As seen in this graph, prices and sales volume illustrated a classic textbook relationship between demand and price. During the peak buying years, between 1979 and 1981, increased demand drove prices up dramatically: 25 percent in 1979; 18 percent in 1980; and 12 percent in 1981. Prices and interest rates increased to the point where fewer and fewer families could afford to buy.

Between 1981 and 1985, the average resale price fell 4 percent. This was largely attributable to price reductions in the condominium market, where the annual average price dropped from $116,274 in 1981 to $102,966 in 1985.

Currently, the indicators for real estate look very strong. December and January are typically very slow months for housing sales. People are usually more concerned with Christmas shopping and post holiday sales, rather than house hunting. However, December,

1985 and January, 1986 proved to be an exception to the rule by showing spectacular gains.

For example, during the month of December in 1982 to 1984, real estate sales averaged 250 units per month. In contrast, during December, 1985, sales jumped to 622 units, a 150 percent increase. Similarly, during the months of January for years 1982 to 1985, sales averaged 250 units per month. The total grew to 544 units in January, 1986, a 118 percent gain.

The increase in home purchases was largely due to a substantial drop in interest rates during the latter part of December. According to the Federal Home Loan Bank Board, Honolulu's effective mortgage rate fell to 11.3 percent in December, a 6-1/2 year low.

Will this surge in real estate activity continue through 1986? Several factors point to an emphatic yes. 1986 should be an excellent year for home buyers and the real estate industry. The sharp decline in interest rates during December reflected investors reaction to a variety of events. Contributing to lower interest rates were a drop in consumer borrowing, the expectation of low inflation due to lower oil prices, and the passage of the Gramm-Rudman-Hollings Deficit Reduction Act.

These factors should continue to exert a positive influence on interest rates through 1986. According to the Blue Chip Financial Forecasts, a survey of 45 top national financial analysts, mortgage rates should maintain their downward trend. The current quarterly average of 11.3 percent is expected to drop to 10.7 percent by the second quarter of 1986.

Several factors confirm these expectations. Effective March 3rd, the Veterans Administration lowered its home loan interest rate a full percentage point, from 10.5 percent to 9.5 percent. This was the first time that mortgages were in the single-digit range in 7-1/2 years. Also in early March, the Federal Reserve Board started a chain reaction by lowering its discount rate (the rate it charges its member banks). This, in turn, allowed banks to lower their prime lending rate and a wide variety of other interest rates. While mortgage rates will not drop as dramatically as the short term rates, further declines in home loans are expected.

Lower mortgage rates have the same effect on housing affordability as lower prices. As the rate drops, families need less income to qualify for the same loan amount (see Figure 4). In the first half of 1982, when interest rates hovered around the 16 percent mark, to qualify for a conventional 30-year $100,000

employment and jobs in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
EMPLOYMENT					
STATE:					
Civilian Labor Force	thous.	January	482.2p	−0.9	1.6
Employment	thous.	January	453.9p	−1.8	1.9
Unemployment	thous.	January	28.4p	15.2	−2.2
Unemployment Rate	percent	January	5.9p	15.7	−3.3
OAHU:					
Civilian Labor Force	thous.	January	364.0p	−1.0	2.4
Employment	thous.	January	345.2p	−1.6	2.9
Unemployment	thous.	January	18.8p	12.2	−6.0
Unemployment Rate	percent	January	5.2p	13.0	−7.1
MAUI COUNTY:					
Civilian Labor Force	thous.	January	46.3p	−0.6	−0.9
Employment	thous.	January	42.8p	−2.4	−1.8
Unemployment	thous.	January	3.5p	27.3	12.9
Unemployment Rate	percent	January	7.6p	28.8	15.2
HAWAII:					
Civilian Labor Force	thous.	January	50.1p	−1.0	−1.3
Employment	thous.	January	45.9p	−1.9	−1.0
Unemployment	thous.	January	4.3p	11.8	−3.4
Unemployment Rate	percent	January	8.4p	12.0	−2.3
KAUAI:					
Civilian Labor Force	thous.	January	21.8p	−0.7	0.0
Employment	thous.	January	20.0p	−2.9	−1.0
Unemployment	thous.	January	1.8p	34.6	9.4
Unemployment Rate	percent	January	8.1p	35.0	11.0
JOB COUNT BY INDUSTRY					
TOTAL JOBS—STATE	thous.	January	473.6p	−1.1	3.0
SUGAR (Mill and Field)	thous.	January	7.4p	0.0	−5.2
PINEAPPLE (Cannery and Field)	thous.	January	2.8p	−14.1	3.8
DIVERSIFIED MANUFACTURING					
(Excluding Sugar and Pineapple)	thous.	January	16.6p	−0.3	6.8
Durable Goods	thous.	January	3.5p	−1.4	−4.2
Non-Durable Goods	thous.	January	13.2p	0.0	4.0
Apparel and Textiles	thous.	January	3.5p	−1.4	12.9
DIVERSIFIED AGRICULTURE					
(Excluding Sugar And Pineapple, but including Agricultural Self-Employed)	thous.	January	6.9p	−6.8	−12.1
CONTRACT CONSTRUCTION	thous.	January	16.9p	−1.7	15.0
TRANSPORTATION	thous.	January	24.7p	0.4	9.8
COMMUNICATION	thous.	January	7.2p	−1.4	−4.0
UTILITIES	thous.	January	2.5p	0.0	2.1
RETAIL TRADE	thous.	January	96.4p	−2.3	2.1
WHOLESALE TRADE	thous.	January	19.7p	−0.8	2.9
FINANCE, INSURANCE AND REAL ESTATE	thous.	January	32.1p	0.0	1.6
HOTEL SERVICES—STATE	thous.	January	27.3p	−1.6	−5.7
Oahu	thous.	January	16.1p	0.9	−0.3
Maui County	thous.	January	6.0p	−4.0	−9.1
Hawaii	thous.	January	3.5p	2.9	−12.5
Kauai	thous.	January	1.8p	−14.6	−23.9
OTHER SERVICES	thous.	January	84.1p	0.8	4.0
FEDERAL GOVERNMENT	thous.	January	32.2p	−1.5	0.0
Civilian Agencies	thous.	January	11.7p	−3.3	0.4
Defense Department	thous.	January	20.6p	−0.2	0.2
STATE GOVERNMENT	thous.	January	50.7p	1.5	8.2
COUNTY GOVERNMENT	thous.	January	12.6p	−1.6	−1.6
NON-AGRICULTURE SELF-EMPLOYED	thous.	January	33.9p	−4.6	4.5
UNEMPLOYMENT INSURANCE					
INSURED UNEMPLOYMENT (Weekly Average)	number	January	9,785	6.1	−36.9
INTRASTATE INITIAL CLAIMS	number	January	7,007	.....	−3.2
INTERSTATE INITIAL CLAIMS	number	January	372	.....	−9.7
UNEMPLOYMENT INSURANCE BENEFITS	thous. $	January	5,172	.....	−37.5

p = preliminary.

public assistance in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
PUBLIC ASSISTANCE					
INCOME MAINTENANCE:					
Recipients[1]	no./persons	January	56,812	−0.8	−5.6
Payments	thous. $	January	7,899	.....	−4.7
MEDICAL ASSISTANCE:					
Recipients[1]	no./patients	January	44,845	−9.0	−0.7
Payments	thous. $	January	11,146	.....	−20.7
FOOD STAMPS:					
Recipients[1]	no./persons	December	94,626	−1.5	−7.0
Payments	thous. $	Jan.-Dec.	92,274	.....	10.9
SERVICES:					
Recipients[1]	no./cases	4th Qtr.	7,519	−2.3	9.5
Payments	thous. $	Yr. to 4th Qtr.	15,535	.....	0.0

[1]Count of recipients is duplicated. A person may be counted in each category.

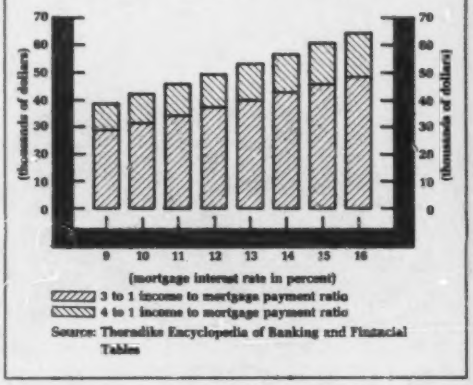
banking and finance in hawaii

FINANCE					
COMMERCIAL BANK DEPOSITS:					
STATE:					
Total Deposits	mil. $	February	7,453.1	2.0	12.5
Debits To Demand Deposits	mil. $	February	16,761.3	.....	11.4
OAHU:					
Total Deposits	mil. $	February	6,172.0	1.7	13.5
Debits To Demand Deposits	mil. $	February	15,170,2	.....	11.0
MAUI COUNTY:					
Total Deposits	mil. $	February	486.1	1.6	9.0
Debits To Demand Deposits	mil. $	February	702.7	.....	15.1
HAWAII:					
Total Deposits	mil. $	February	533.7	3.8	7.0
Debits To Demand Deposits	mil. $	February	617.7	.....	10.8
KAUAI:					
Total Deposits	mil. $	February	261.3	4.3	8.8
Debits To Demand Deposits	mil. $	February	270.7	.....	26.3
BANK LOANS OUTSTANDING—STATE:	mil. $	4th Qtr.	4,615.0	3.2	9.8
Real Estate	mil. $	4th Qtr.	1,881.3	3.6	11.7
Consumer	mil. $	4th Qtr.	1,054.9	4.6	11.7
Commercial & Industrial	mil. $	4th Qtr.	1,338.0	3.3	8.0
Other	mil. $	4th Qtr.	340.8	−3.5	1.8
CONVENTIONAL HOME MORTGAGE RATES: HONOLULU	percent	December	11.3	−2.6	−11.7
SAVINGS & LOAN ASSOCIATIONS:[1]					
TOTAL DEPOSITS	mil. $	December	3,598.0	0.1	−7.9
TOTAL LOANS	mil. $	December	93.3	40.9	NA
MORTGAGE LOANS	mil. $	December	77.8	47.3	76.4
TAX COLLECTIONS:[2]					
STATE	thous. $	January	154,358	26.0	13.3
Oahu	thous. $	January	129,712	21.5	10.3
Maui County	thous. $	January	10,679	93.4	30.5
Hawaii	thous. $	January	9,981	51.7	34.6
Kauai	thous. $	January	4,058	12.0	34.5

[1]Includes Hawaii and Guam. Reporting categories changed in July, 1985.
[2]Taxes collected by the State Department of Taxation. Excludes property taxes which were formerly collected by the State but are now collected by the Counties.

mortgage, a family would need an annual income of $48,400, using a 3 to 1 ratio of income to payments. The same mortgage at 9 percent would only require an annual income of $29,000.

FIGURE 4
QUALIFYING INCOME FOR $100,000 30-YR MORTGAGE



Source: Thorndike Encyclopedia of Banking and Financial Tables

In 1983, the median family income was $24,800. Converting these numbers into a ratio of income earned to income needed, at 16 percent, the average family only earned 51 percent of the necessary amount to qualify for a $100,000 mortgage. However, at 9 percent, the family would have had 86 percent of the necessary income.

As long as prices remain stable, falling interest rates make home ownership a greater possibility for a greater number of families. According to Locations, Inc., over 70,000 households on Oahu qualify for an average-priced residence in 1986. In contrast, only 40,000 could afford the average home/condominium in 1985, and only 15,000-20,000 households between 1981 and 1984.

There are several other factors that impact home buying trends besides interest rates and prices; they also point to a good year for real estate. There is a high degree of pent up demand from the days of high interest rates and high prices. There is also a general optimism regarding the economy which means more jobs and higher income. In addition, the population is expected to expand by 1.5 percent during 1986.

All these facts mean that more people with more money are buying homes. Add stable prices and lower interest rates and you have substantial increases in the number of people who qualify for home loans.

Improvements in real estate are also important to other economic sectors. As more people buy homes or condominiums, there will be a greater incentive for contractors to build. That means the construction industry should get a much needed boost in 1986.

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Welcoming Japan's one millionth visitor to Hawaii. *Photo: Bob Abraham*

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ECONOMIC INDICATORS

Research Department, First Hawaiian Bank | May June 1986

The Resurgence of Hawaii's Pineapple Industry

The conventional wisdom about the pineapple industry is that it has an uncertain future. Certainly, the statistical trends in the industry are not encouraging. From ten pineapple companies farming 77,000 acres in the mid-1950s, there are now three farming less than half that acreage. From over a million tons of pineapple marketed in 1967, less than 600,000 tons of pineapple are marketed today. The industry employed upwards of 12,000 workers in the 1940s; but, now only 3,900 are on the payrolls. The latest sign of distress is a 53-percent drop in 1985 taxable income for canned pineapple sales.

Everywhere, sentiments about pineapple's future strike a doubtful chord—everywhere, that is, except within the pineapple industry itself. There, one finds a sense of quiet optimism. While little of this positive mood has surfaced publicly, that it exists can be inferred from recent events in the industry.

Ten years ago, Hawaii's pineapple industry struggled back to health, after fending off stiff competition from foreign growers and mainland fruit processors for two long decades. These pressures had so chopped profits that the industry shrank from ten companies to the Dole Hawaii Division of Castle & Cooke, Maui Pineapple Co., and Del Monte. Once consolidated, however, conditions began to improve in the industry. Hawaii's biggest rivals for the mainland market, Taiwan and Malaysia, reduced exports substantially as industrial activities began to receive higher priority than agriculture in their economies. In addition, drought conditions there, and on the mainland, reduced supplies of competing fruit. Also, the mainland market for pineapple began to solidify. Hawaii's growers earned the reputation as dependable suppliers of quality fruit in contrast to foreign sources considered vulnerable to the uncertainties of weather and politics.

Since then, productivity in Hawaii's pineapple industry showed strong improvement. Between 1956 and 1985, the farm value of total production jumped 142 percent, up to $90 million. This reflected the best farm prices ever recorded for pineapple, and translated into a 430-percent gain in farm value of pineapple harvested per acre. Much of the gain is due to the growth of the fresh fruit market, where farm prices are four times the price for processed fruit. Last year, fresh fruit represented 22 percent of total production, another record high.

Another reason for the surge in productivity was the adoption of drip irrigation by Del Monte, Dole, and Maui Pineapple Co. Drip irrigation makes maximum use of scarce water supplies, and allows more economical distribution of fertilizer and pesticides. Because of the expense of these systems' investment in drip irrigation represents a long-term commitment to continued operation.

The perception of pineapple's doubtful future persists because of the scarcity of reliable statistics. The most reliable information has come from excise tax-base data, issued monthly by the State Tax Department, based on returns filed by the companies. According to the data, revenues dropped precipitously for unexplained reasons in 1985 to 53 percent below 1984 levels. The true reason was that Dole's cannery site was approved as a foreign trade subzone in July, 1985. Dole was not only exempted from paying duty on imported tinplate, but also from the requirement to pay the state excise tax. With Maui Pineapple Co.'s application for foreign trade subzone status now approved, excise tax-base figures will no longer be useable for following trends in the pineapple industry.

In fact, the prospects for the industry look optimistic. The Pineapple Growers Association of Hawaii reported a record year in 1984 with $249.5 million in revenues, an increase of 14 percent over 1983. In 1985, revenues dropped 11 percent to $222.5 million; but, the industry is expecting favorable results over the next few years, barring bad weather and excessive mainland and foreign fruit production.

Del Monte, which at one time announced the closing of its Molokai plantation, is expanding its planting there by 250 acres annually until output is doubled in 1988. Although Del Monte closed its cannery in 1983, it continues to operate a frozen pineapple product plant in Honolulu, and has built a new juice concentrate plant, where its fresh pineapple is packed for shipment.

Dole announced plans to renovate and upgrade its present Iwilei cannery. The company's production on Lanai is expected to increase with further expansion of drip irrigation. Dole's worldwide earnings from pineapple for fiscal 1985 were the highest in five years.

Maui Pineapple Co. has been successful in developing the private label market; but, it also has expanded the institutional market in the past few years, and will need more land to increase production significantly. Negotiations are in progress with Wailuku Agribusiness Co., a subsidiary of C. Brewer & Co., for Maui Pineapple Co. to grow pineapple on 2,000 acres of former sugar lands.

Thus, while it is true that the pineapple industry has diminished in size over the years, it continues to grow in productivity and output. With a level of stability in the world pineapple market, that growth trend can be expected to continue in the years ahead.

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MAY/JUNE FEATURE STORY: BANNER YEAR FOR TOURISM, IN 1986

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CURRENT BUSINESS TRENDS

Recent statistics on business activity in Hawaii show that gross business receipts, an overall measure of activity in the economy, advanced during the first two months of 1986 by 2.4 percent over the same period in 1985. This indicates that the economy is experiencing healthy growth. The increase was due largely to strong performances by the Kauai and Maui economies, which experienced 37- and 4-percent increases through February of 1986. Over the same period, Oahu's business receipts increased by 1.6 percent, while the Big Island grew by 0.5 percent.

Coming at the peak of the winter season, tourist arrivals in March showed a sizeable 14-percent increase over January, placing the overnight-and-longer visitor count at 506,930 persons. Westbound visitors (from the Mainland, Canada, and Europe) were up by 16 percent at 403,120 persons. Eastbound visitors (from the Orient and Oceania) totalled 103,810 persons, representing a 4-percent gain over February. Compared to the previous year, March displayed an impressive 9-percent increase, the best in the last 13 months.

Among the Neighbor Islands, only the Big Island experienced a decline in westbound visitor counts in March, falling by 0.6 percent from the previous month. In the meantime, Oahu's westbound tourist arrivals came to 289,210 persons, up 15 percent from February, while Maui received 188,080 westbound visitors, up 10 percent, and Kauai hosted 87,740 westbound visitors, up 6 percent.

Hawaii's sugar industry has shown improvement since the Farm Act was signed into law on December 23, 1985. Sugar production through March of this year rose 21 percent to 114,000 tons, while sugar prices declined by less than 1 percent. While still below the 1985

u. s. economic indicators

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
GROSS NATIONAL PRODUCT**					
In Current Dollars	bil. $	1st Qtr.	4,117p	1.4	5.1
In 1982 Dollars	bil. $	1st Qtr.	3,619p	0.8	2.0
PERSONAL INCOME**	bil. $	March	3,407p	0.2	4.6
INTEREST RATES					
AVERAGE PRIME RATE	percent	March	9.10	−4.2	−13.3
CONSTRUCTION					
CONSTRUCTION PUT IN PLACE*	bil. $	February	360.5p	1.2	7.8
CONSTRUCTION COST INDEXES					
Residences	1967 = 100	January	372.2	0.2'	2.1
Apts., Hotels, Office Bldgs.	1967 = 100	January	370.0	0.2'	1.6
EMPLOYMENT					
CIVILIAN EMPLOYMENT*	thous.	March	108,788	0.2	1.7
UNEMPLOYMENT*	thous.	March	8,419	−1.3	0.4
UNEMPLOYMENT RATE*	percent	March	7.2	−1.4	−1.4
PRICES					
CONSUMER PRICE INDEXES					
Wage Earners and Clerical Workers	1967 = 100	March	321.4	−0.6	1.9
All Urban Consumers	1967 = 100	March	326.0	−0.5	2.3
PRODUCER PRICE INDEXES					
Finished Goods*	1967 = 100	March	288.6p	−1.1	−1.2
All Commodities*	1967 = 100	February	304.7p	−1.4	−1.4

p = preliminary. 'Compared to November, 1985. *Seasonally adjusted. **Seasonally adjusted at annual rates.

business activity in hawaii

	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
BUSINESS SALES					
GROSS BUSINESS RECEIPTS					
STATE	mil. $	Jan.-Feb.	4,178.4	.....	2.4
Oahu	mil. $	Jan.-Feb.	3,514.9	.....	1.6
Maui County	mil. $	Jan.-Feb.	280.6	.....	4.0
Hawaii	mil. $	Jan.-Feb.	273.8	.....	0.5
Kauai	mil. $	Jan.-Feb.	109.1	.....	37.2
DIVERSIFIED MANUFACTURING	mil. $	Jan.-Feb.	78.9	.....	−4.2
DIVERSIFIED AGRICULTURE	mil. $	Jan.-Feb.	42.0	.....	−3.2
RETAILING	mil. $	Jan.-Feb.	1,611.6	.....	6.8
WHOLESALING	mil. $	Jan.-Feb.	1,027.1	.....	−4.8
SERVICES	mil. $	Jan.-Feb.	936.5	.....	−1.8
OAHU NEW CAR SALES	number	Jan.-Feb.	6,169p	.....	−10.8
HONOLULU CONSUMER PRICE INDEX					
Wage Earners and Clerical Workers	1967 = 100	February	308.5	0.9'	2.7
All Urban Consumers	1967 = 100	February	301.2	0.9'	2.9
TOURISM					
VISITOR EXPENDITURES	mil. $	1985	4,900p	.....	15.3
OVERNIGHT OR LONGER VISITORS	number	March	506,930p	13.7	9.1
	number	Jan.-Mar.	1,386,790p	.....	6.6
Westbound	number	March	403,120p	16.4	−6.4
	number	Jan.-Mar.	1,088,330p	.....	7.6
Eastbound	number	March	103,810p	4.4	9.8
	number	Jan.-Mar.	298,460p	.....	3.0
AVERAGE DAILY VISITOR CENSUS	number	Jan.-Mar.	127,190p	.....	6.2
AVERAGE LENGTH OF STAY	no. of days	Jan.-Mar.	10.5p	.....	−1.9
MEETING ATTENDANCE	number	January	25,991	.....	−10.3
ORGANIZED GROUP TOURS	number	Jan.-Mar.	238,870p	.....	−6.1
VISITOR COUNT BY COUNTY*					
Oahu	number	March	289,210p	14.9	−6.5
	number	Jan.-Mar.	785,690p	.....	5.3
Maui County	number	March	188,080p	10.5	−0.1
	number	Jan.-Mar.	514,150p	.....	−0.8
Hawaii	number	March	72,180p	−0.6	2.1
	number	Jan.-Mar.	214,220p	.....	4.8
Kauai	number	March	87,740p	6.0	0.4
	number	Jan.-Mar.	246,920p	.....	10.6

p = preliminary. 'Compared to December, 1985. *Estimated Westbound.

business activity in hawaii [cont.]

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
VISITOR ACCOMMODATIONS					
STATE	number	Feb., 1986	66,308	.....	0.6
Oahu	number	Feb., 1986	39,010	.....	1.1
Waikiki	number	Feb., 1986	34,650	.....	2.3
Maui Island	number	Feb., 1986	13,451	.....	−0.5
Molokai	number	Feb., 1986	635	.....	1.3
Lanai	number	Feb., 1986	10	.....	0.0
Hawaii	number	Feb., 1986	7,280	.....	−3.1
Kauai	number	Feb., 1986	5,922	.....	4.7
HOTEL OCCUPANCY					
STATE	percent	March	86.5p	−6.6	−0.7
		Jan.-Mar.	86.8p	.....	−1.1
Oahu	percent	March	89.9p	−5.9	0.2
		Jan.-Mar.	89.6p	.....	−2.8
Maui Island	percent	March	90.5p	−2.0	−0.8
		Jan.-Mar.	88.5p	.....	−1.0
Hawaii	percent	March	69.0p	−15.6	−3.8
		Jan.-Mar.	72.7p	.....	−0.3
Kauai	percent	March	81.2p	−11.1	−3.3
		Jan.-Mar.	85.1p	.....	9.4
DEFENSE EXPENDITURES					
APPROPRIATED FUNDS, TOTAL	mil. $	Yr. to 4th Qtr.	2,041.0	.....	4.6
Military Payroll	mil. $	Yr. to 4th Qtr.	835.8	.....	−0.2
Civilian Payroll	mil. $	Yr. to 4th Qtr.	627.5	.....	4.3
Local Purchases	mil. $	Yr. to 4th Qtr.	577.7	.....	13.0
SUGAR					
VALUE OF CROP SALES					
(Unprocessed Cane)	mil. $	1984	256.2	.....	−4.0
SUGAR PRODUCTION	thous. tons	Jan.-Mar.	114.1	.....	21.1
AVERAGE N. Y. RAW SUGAR PRICE	$/ton	Jan.-Apr.	413.2	.....	−0.4
PINEAPPLE					
VALUE OF CROP SALES					
(Fresh Equivalent)	thous. $	1985	90.1	.....	0.2
SHIPMENTS, FRESH	thous. lbs.	Jan.-Mar.	54,373	.....	−13.9
DIVERSIFIED AGRICULTURE					
CROPS	thous. $	1984	120,756	.....	5.3
FLOWERS & NURSERY PRODUCTS	thous. $	1984	42,905	.....	18.6
Anthurium Outshipments	th. dozens	Jan.-Feb.	242.9	.....	9.2
Potted Foliage Plants	thous. $	1984	14,050	.....	29.7
FRUITS & NUTS	thous. $	1984	39,749	.....	3.2
Papaya Sales	th. lbs.	Jan.-Mar.	11,690	.....	−8.5
Average Farm Price	cents/lb.	March	20.0	−4.8	11.7
Macadamia Nut Sales (in shell)	th. lbs.	1985	37,000	.....	−1.9
Average Farm Price	cents/lb.	1985	70.0	.....	1.2
VEGETABLES AND MELONS[3]	th. lbs.	Jan.-Apr.	20,348	.....	−0.3
LIVESTOCK	thous. $	1984	87,025	.....	0.6
BEEF PRODUCTION (Dressed Wt.)	th. lbs.	Jan.-Feb.	5,886	.....	14.2
Average Farm Price (Feedlot Beef)	cents/lb.	February	80.0	−7.5	−9.1
HOG PRODUCTION (Dressed Wt.)	th. lbs.	Jan.-Feb.	972	.....	1.1
Average Farm Price	cents/lb.	February	104.0	−0.5	−0.5
MILK PRODUCTION	mil. lbs.	Jan.-Feb.	25.4	.....	9.0
Average Price Sold to Plants	$/100 lbs.	February	20.22	−0.1	−1.5
EGG PRODUCTION	mil.	Jan.-Mar.	57.1	.....	7.1
Average Farm Price	cents/doz.	March	80.0	3.2	−8.6
PUBLIC UTILITIES					
ELECTRICITY GENERATED	mil. kwh.	Jan.-Mar.	1,764.6	.....	5.3
GAS SALES	th. therms.	Jan.-Mar.	12,481	.....	−1.0
TELEPHONE LINES IN SERVICE	thous.	Jan.-Mar.	468.1	.....	1.7

p = preliminary.
[2]From Hawaii County.
[3]Includes snap beans, cabbage, celery, sweet corn, cucumbers, lettuce, onions, green peppers, tomatoes, and watermelons.

average level of 7,550 jobs, sugar industry employment in March 1986 was up 0.7 percent from the previous month at 7,400 jobs.

Unlike the sugar industry, the pineapple industry showed disappointing results. Shipments of fresh pineapple through March dropped by 14 percent over the same period in 1985. However, cumulative pineapple-industry job counts through March showed an increase of 14 percent over the same month in 1985.

Other crops showed mixed results. Anthurium outshipments through February were at 124,000 dozens, up 9 percent, while papaya sales through March were at 4 million pounds, down 8 percent over the same period in 1985. Meanwhile, vegetable and melon production through March showed a moderate gain of 5 percent at 15 million pounds. Overall job counts in diversified agriculture in March stood at 7,650 jobs, up 8 percent from the same period in 1985.

The construction industry was off to a good year. In February, new construction expenditures totalled $109 million, up 20 percent from the same period in 1985. Future construction, as indicated in building permit data, promises new strength. On Oahu, where most construction takes place, the value of residential permits through March showed a 19-percent increase, while the value of nonresidential permits recorded a 45-percent increase.

After a seasonal decline in January, the number of employed persons rose to 459,300 in February, up 1 percent from the previous month and 2 percent from the same period in 1985. The civilian labor force displayed a similar pattern. Following a brief pause in January, Hawaii's civilian labor force was estimated at 486,800 persons, up 1 percent from January and 3 percent from February 1985. The number of unemployed stood at 27,500 people in February, down 2 percent from January.

Total job counts in Hawaii continued to show positive growth. The state job counts in March rose to 473,900 jobs, up 3 percent from March of last year. Growth was shared primarily by such industries as pineapple (up 6 percent), diversified manufacturing (up 6 percent), diversified agriculture (up 8 percent), transportation (up 8 percent), retailing (up 4 percent), and wholesaling (up 3 percent). Over-the-year shrinkages occurred primarily in construction (down 10 percent), hotel services (down 6 percent), and the sugar industry (down 2 percent).

BANNER YEAR FOR TOURISM IN 1986

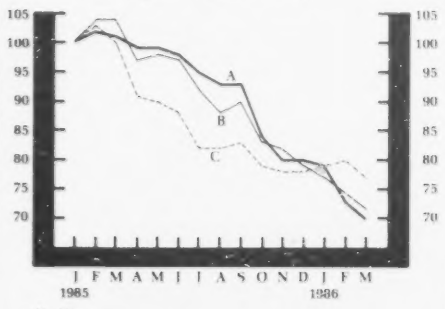
Tourist arrivals should exceed all previous expectations during 1986. What looked like a good year, may now be shaping up into a banner year. Several national and international factors are contributing to the new, improved outlook for Hawaii's visitor industry, including: strong economic growth nationally; the continued devaluation of the U.S. dollar; cheaper oil prices; and increased terrorism abroad.

First, on the national level, the U.S. economy showed a strong rebound in the first quarter of 1986. Growing at a much faster pace than expected, the Gross National Product (GNP) increased by 3.7 percent during the January-March, 1986 period. The GNP is a broad index that measures the nation's economic health. The better than average expansion in GNP seen in the first quarter was welcome news after three quarters of sluggish growth. The upturn in growth, combined with the lowest inflation in almost two decades, indicate that the national economy is again gathering steam.

The economic rebound means that individuals will not only have greater disposable income, but also greater confidence in the economy. That, in turn, will stimulate spending on "big ticket" items such as refrigerators, televisions, and vacations. And, it will boost the westbound segment of Hawaii's visitor market, which came to 3.7 million visitors in 1985.

The second major factor contributing to increased domestic tourism is the continuing decline in the value of the U.S. dollar against other major foreign currencies (see Figure 1). Between September, 1985, and April, 1986, the dollar fell about 30 percent against the Japanese yen. For the travelers from Japan, that means a 30-percent discount on their vacation cost, and should provide

Figure 1
FOREIGN EXCHANGE RATES
CURRENCY UNITS PER DOLLAR
Jan. 1985 = 100



A. Yen
B Deutsche Mark
C. Pound

business activity in hawaii [cont.]

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
CONSTRUCTION PUT IN PLACE					
STATE	thous. $	Jan.-Feb.	251,103	.....	42.3
Oahu	thous. $	Jan.-Feb.	216,852	.....	47.9
Maui County	thous. $	Jan.-Feb.	13,907	.....	42.2
Hawaii	thous. $	Jan.-Feb.	13,977	.....	−13.2
Kauai	thous. $	Jan.-Feb.	6,367	.....	62.2
HONOLULU CONSTRUCTION COST INDEXES					
SINGLE FAMILY	1967 = 100	February	364.7	−0.1	3.6
HIGH-RISE	1967 = 100	February	382.3	−0.2	3.5
PRIVATE PERMITS AUTHORIZED					
STATE RESIDENTIAL	thous. $	Jan.-Dec.	566,033	.....	48.2
Single Family Units	number	Jan.-Dec.	4,741	.....	14.7
Multiple Family Units	number	Jan.-Dec.	2,556	.....	104.5
NONRESIDENTIAL	thous. $	Jan.-Dec.	323,256	.....	65.1
OAHU RESIDENTIAL	thous. $	Jan.-Mar.	102,153	.....	19.3
Single Family Units	number	Jan.-Mar.	328	.....	9.0
Multiple Family Units	number	Jan.-Mar.	1,247	.....	24.2
NONRESIDENTIAL	thous. $	Jan.-Mar.	48,707	.....	45.3
MAUI CO. RESIDENTIAL	thous. $	Jan.-Dec.	145,915	.....	256.9
Single Family Units	number	Jan.-Dec.	984	.....	54.2
Multiple Family Units	number	Jan.-Dec.	457	.....	7,516.7
NONRESIDENTIAL	thous. $	Jan.-Dec.	32,718	.....	72.6
HAWAII RESIDENTIAL	thous. $	Jan.-Mar.	15,117	.....	−56.3
Single Family Units	number	Jan.-Mar.	262	.....	12.4
Multiple Family Units	number	Jan.-Mar.	4	.....	−96.9
NONRESIDENTIAL	thous. $	Jan.-Mar.	6,740	.....	−41.2
KAUAI RESIDENTIAL	thous. $	Jan.-Mar.	7,067	.....	−38.9
Single Family Units	number	Jan.-Mar.	72	.....	−15.3
Multiple Family Units	number	Jan.-Mar.	0	.....	−100.0
NONRESIDENTIAL	thous. $	Jan.-Mar.	35,069	.....	1,050.2
PUBLIC CONTRACTS AWARDED					
TOTAL GOVERNMENT PROJECTS					
STATE	thous. $	Jan.-Apr.	105,192	.....	22.4
Oahu	thous. $	Jan.-Apr.	82,587	.....	44.0
Maui County	thous. $	Jan.-Apr.	9,307	.....	−50.8
Hawaii	thous. $	Jan.-Apr.	9,621	.....	167.2
Kauai	thous. $	Jan.-Apr.	3,678	.....	−39.2
BY LEVEL OF GOVERNMENT					
Federal	thous. $	Jan.-Apr.	19,600	.....	−7.0
State	thous. $	Jan.-Apr.	62,194	.....	131.8
County	thous. $	Jan.-Apr.	23,398	.....	−38.5
REAL ESTATE RESALES					
STATE Single Family	number	Jan.-Mar.	641	.....	24.2
Average Price	dollars	Jan.-Mar.	163,534	.....	−1.6
Condominium	number	Jan.-Mar.	799	.....	20.0
Average Price	dollars	Jan.-Mar.	108,523	.....	−0.3
OAHU Single Family	number	Jan.-Mar.	392	.....	−1.5
Average Price	dollars	Jan.-Mar.	193,915	.....	7.0
Condominium	number	Jan.-Mar.	603	.....	9.2
Average Price	dollars	Jan.-Mar.	104,891	.....	1.4
MAUI CO. Single Family	number	Jan.-Mar.	88	.....	100.0
Average Price	dollars	Jan.-Mar.	134,821	.....	−11.1
Condominium	number	Jan.-Mar.	136	.....	63.9
Average Price	dollars	Jan.-Mar.	130,295	.....	−10.6
HAWAII Single Family	number	Jan.-Mar.	123	.....	108.5
Average Price	dollars	Jan.-Mar.	95,192	.....	13.2
Condominium	number	Jan.-Mar.	25	.....	66.7
Average Price	dollars	Jan.-Mar.	87,310	.....	5.8
KAUAI Single Family	number	Jan.-Mar.	38	.....	153.3
Average Price	dollars	Jan.-Mar.	137,827	.....	1.4
Condominium	number	Jan.-Mar.	35	.....	118.8
Average Price	dollars	Jan.-Mar.	101,650	.....	−21.4

e = preliminary

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population in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
POPULATION					
STATE:					
Total De Facto Population	thous.	July 1, 1985	1,149.9p	.....	0.9
Total Resident Population	thous.	July 1, 1985	1,053.9p	.....	1.6
OAHU:					
Total De Facto Population	thous.	July 1, 1984	859.8p	.....	1.5
Total Resident Population	thous.	July 1, 1984	805.3p	.....	1.6
MAUI COUNTY:					
Total De Facto Population	thous.	July 1, 1984	114.5p	.....	10.3
Total Resident Population	thous.	July 1, 1984	83.1p	.....	4.0
HAWAII:					
Total De Facto Population	thous.	July 1, 1984	112.5p	.....	1.7
Total Resident Population	thous.	July 1, 1984	106.4p	.....	3.4
KAUAI:					
Total De Facto Population	thous.	July 1, 1984	54.4p	.....	7.3
Total Resident Population	thous.	July 1, 1984	44.0p	.....	2.1
CIVILIAN RESIDENT POPULATION:					
STATE	thous.	July 1, 1984	981.9p	.....	2.0
MILITARY PERSONNEL:					
STATE	number	July 1, 1985	58,005	.....	−4.6
Ashore	number	July 1, 1985	53,848	.....	−4.4
Afloat	number	July 1, 1985	4,157	.....	−7.3
CIVILIAN MILITARY DEPENDENTS	number	July 1, 1985	64,281	.....	−4.2
FOREIGN IMMIGRATION*	number	Jan.-Apr.	1,835	.....	6.0

p = preliminary.
*Includes only those entering Honolulu ports and does not include status changes.

income in hawaii

INCOME					
TOTAL PERSONAL INCOME**	mil. $	4th Qtr.	14,582p	1.7	5.5
EMPLOYMENT INCOME:	mil. $	4th Qtr.	10,697p	2.2	7.3
Manufacturing	mil. $	4th Qtr.	499p	4.4	6.6
Construction & Mining	mil. $	4th Qtr.	604p	2.5	41.5
Wholesale	mil. $	4th Qtr.	463p	1.3	10.0
Retail	mil. $	4th Qtr.	1,182p	0.3	3.0
Finance, Ins., & Real Estate	mil. $	4th Qtr.	705p	2.3	5.1
Trans., Comm., & Util.	mil. $	4th Qtr.	953p	2.9	5.8
Services	mil. $	4th Qtr.	2,487p	2.9	9.1
Farm & Other	mil. $	4th Qtr.	336p	7.3	−2.9
Federal Civilian	mil. $	4th Qtr.	959p	0.1	2.8
Federal Military	mil. $	4th Qtr.	1,329p	4.3	8.0
State & Local	mil. $	4th Qtr.	1,181p	−0.1	2.7
PROPERTY INCOME:					
(Dividends, Interest, & Rent)	mil. $	4th Qtr.	2,711p	0.7	1.2
TRANSFER PAYMENTS:					
(1,906) minus Personal Contributions for Social Insurance (732)	mil. $	4th Qtr.	1,174p	−1.2	−0.4
PER CAPITA PERSONAL INCOME:					
STATE	dollars	1985	13,542p	.....	3.8
Oahu	dollars	1983	12,697p	.....	4.9
Maui County	dollars	1983	10,963p	.....	3.4
Hawaii	dollars	1983	9,396p	.....	3.1
Kauai	dollars	1983	9,867p	.....	2.7

**Total personal income and all components are seasonally adjusted at annual rates.
†Includes wage and salary disbursements, proprietors' income, and other labor income.
p = preliminary.

HAWAIIAN BANK

an extra incentive for Japanese travelers to come to Hawaii.

While encouraging foreign visitors to come to the U.S., the softer dollar also acts to discourage American travelers from going abroad. With the weakening of the dollar, many European and Asian countries are not the bargains they were a year ago. Therefore, the changes in exchange rates should result in heavier traffic from foreign countries, and more domestic travel by Americans, who previously might have gone to Europe or Asia.

Terrorism is the third area influencing the flow of tourism. The recent, tragic terrorist incidents have made even seasoned travelers much more cautious.

According to a survey by Travel Weekly magazine, the growing threat of terrorism has affected bookings, and has increased cancellations to specific European and Middle Eastern areas. The 209 travel agents surveyed said that more than half of the cancellations later rebooked, usually to a domestic destination. Officials at the government tourist office stated that the visitor count to Europe may be down by 15 percent this year, and that the count to the Middle East was already down by as much as 60 to 70 percent. According to one news release, Americans making reservations for travel to Egypt were near zero, and reservations for Italy and Greece were down by 70 percent.

How this will affect travel to Hawaii is uncertain. Many industry officials are reluctant to address the issue, not wanting to capitalize on the misfortunes of other destinations. But most agree that there will be some impact. Some releases have already cited conventions that switched to Hawaii from Europe due to the fear of terrorist attacks.

Fourth and finally, falling oil prices will have a positive impact not only for consumers, but also for travelers this year. As oil prices plunge, fuel costs also drop, and fuel is a major operating cost for airlines. According to United Airlines, a one-cent-a-gallon drop in fuel prices saves the airlines $16 million per year. Because of deregulation and increased competition among the airlines, some of these savings will be passed onto the customer in terms of lower air fares.

However, the fare reductions apply to competing visitor destinations, as well as Hawaii. In addition, the drop in oil prices has caused the price of gasoline to come down, which will encourage some people to take driving vacations this year.

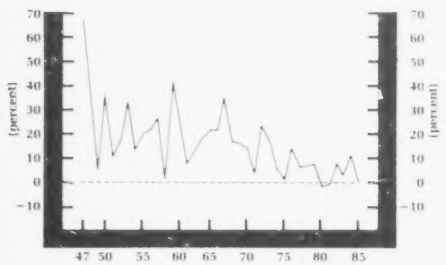
Taken together, these four factors point to increased domestic travel in

1986. A survey of New York travel agents concluded that people were showing greater interest not only in domestic destinations, but also in Canada, the Caribbean, Mexico, the South Pacific, and Asia. While Hawaii should get a fair share of the improved domestic market, it should be noted that other destinations are also gearing up to take advantage of current conditions. For example, Canada, with its Expo '86, is spending $14 million on advertising to attract more visitors from the U.S. to Vancouver. California launched a $5 million campaign to encourage residents to see their own state.

However, as long as Hawaii remains competitive and maintains its positive image as a quality destination, the number of visitors in 1986 should show a significant jump.

Hawaii's visitor count was expected to pass the 5 million mark in 1985. The number of arrivals was promising for the first four months of the year until the industry was hit by the United Airlines pilot strike. This devastated the industry and depressed tourist traffic. After the strike was settled, aggressive advertising campaigns and promotional programs encouraged enough visitors to come to Hawaii to bring the final annual count up to 4.9 million, a meager 0.6 percent above 1984's total. There were only two years since World War II during which Hawaii's visitor industry showed such minimal growth (see Figure 2).

Figure 2
TOURIST ARRIVALS, ANNUAL PERCENT CHANGE
STATE OF HAWAII
1947-1985



Now, given the improved scenario, the 1986 arrival count should easily surpass 5 million. The over-the-year gain is expected to fall in the 7 to 9 percent range, that is, 5.2 to 5.3 million visitors to Hawaii in 1986.

The numbers through the first quarter of this year substantiate the expected gains. So far, during 1986, arrivals are up a very healthy 7 percent. In March alone, there were 506,930 visitors; the first time in the history of Hawaii's tourism industry that the monthly count

employment and jobs in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
EMPLOYMENT					
	thous.	March	495.4p	1.8	3.7
	thous.	March	467.1p	1.7	2.4
	thous.	March	28.3p	2.7	32.3
	percent	March	5.7p	0.0	26.7
	thous.	March	373.5p	1.8	2.4
	thous.	March	354.7p	1.7	1.4
	thous.	March	18.8p	3.3	26.3
	percent	March	5.0p	0.0	22.0
	thous.	March	47.3p	1.5	7.5
	thous.	March	44.2p	1.5	5.4
	thous.	March	3.2p	1.6	46.5
	percent	March	6.6p	0.0	37.5
	thous.	March	52.1p	1.7	10.9
	thous.	March	47.7p	2.1	8.9
	thous.	March	4.5p	−1.1	36.9
	percent	March	8.5p	−3.4	23.2
	thous.	March	22.5p	2.0	2.5
	thous.	March	20.6p	1.0	−1.2
	thous.	March	2.0p	11.4	69.6
	percent	March	8.7p	11.5	64.2
JOB COUNT BY INDUSTRY					
	thous.	March	473.9p	0.3	2.9
	thous.	March	7.4p	0.7	−2.0
	thous.	March	3.6p	4.3	4.3
	thous.	March	16.6p	1.2	6.1
	thous.	March	3.4p	−1.4	9.7
	thous.	March	13.2p	1.5	4.8
	thous.	March	3.5p	1.4	18.6
	thous.	March	7.6p	0.7	7.8
	thous.	March	16.4p	−3.0	−10.4
	thous.	March	24.2p	−0.6	8.1
	thous.	March	7.2p	0.7	−2.7
	thous.	March	2.4p	−2.0	0.0
	thous.	March	97.0p	0.0	3.8
	thous.	March	19.4p	−1.0	2.9
	thous.	March	32.4p	0.6	0.6
	thous.	March	27.6p	0.5	−6.0
	thous.	March	16.4p	0.9	0.9
	thous.	March	5.8p	−1.7	−13.4
	thous.	March	3.5p	0.0	−13.6
	thous.	March	1.8p	0.0	−23.4
	thous.	March	85.1p	0.9	4.7
	thous.	March	32.1p	−0.2	−0.9
	thous.	March	11.6p	0.0	−0.9
	thous.	March	20.5p	−0.2	−1.0
	thous.	March	51.0p	1.8	2.5
	thous.	March	12.6p	−0.4	−0.8
	thous.	March	31.2p	−1.1	19.1
UNEMPLOYMENT INSURANCE					
	number	February	9,330	−4.6	−21.3
	number	Jan.-Feb.	11,581	.....	−7.9
	number	Jan.-Feb.	696	.....	−2.9
	thous. $	Jan.-Feb.	9,813	.....	−29.8

p = preliminary

public assistance in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
PUBLIC ASSISTANCE					
INCOME MAINTENANCE					
Recipients	no./persons	March	55,646	−1.4	−5.7
Payments	thous. $	Jan.-Mar.	23,236	.....	−6.6
MEDICAL ASSISTANCE					
Recipients	no./patients	January	44,845	−9.0	−0.7
Payments	thous. $	January	11,146	.....	−20.7
FOOD STAMPS					
Recipients	no./persons	February	93,353	0.2	−7.2
Payments	thous. $	Jan.-Feb.	15,032	.....	−4.4
SERVICES					
Recipients	no./cases	4th Qtr.	7,519	−2.3	9.5
Payments	thous. $	Yr. to 4th Qtr.	15,535	.....	0.0

*Count of recipients is duplicated. A person may be counted in each category.

banking and finance in hawaii

FINANCE					
COMMERCIAL BANK DEPOSITS					
STATE					
Total Deposits	mil. $	February	7,453.1	2.0	12.5
Debits To Demand Deposits	mil. $	February	16,761.3	.....	11.4
OAHU					
Total Deposits	mil. $	February	6,172.0	1.7	13.5
Debits To Demand Deposits	mil. $	February	15,170.2	.....	11.0
MAUI COUNTY					
Total Deposits	mil. $	February	486.1	1.6	9.0
Debits To Demand Deposits	mil. $	February	702.7	.....	15.1
HAWAII					
Total Deposits	mil. $	February	533.7	3.8	7.0
Debits To Demand Deposits	mil. $	February	617.7	.....	10.8
KAUAI					
Total Deposits	mil. $	February	261.3	4.3	8.8
Debits To Demand Deposits	mil. $	February	270.7	.....	26.3
BANK LOANS OUTSTANDING—STATE	mil. $	4th Qtr.	4,615.0	3.2	3.8
Real Estate	mil. $	4th Qtr.	1,881.3	3.6	11.7
Consumer	mil. $	4th Qtr.	1,054.9	4.6	11.7
Commercial & Industrial	mil. $	4th Qtr.	1,338.0	3.3	8.0
Other	mil. $	4th Qtr.	340.8	−3.5	1.8
CONVENTIONAL HOME MORTGAGE RATES, HONOLULU SAVINGS & LOAN ASSOCIATIONS	percent	December	11.3	−2.6	−11.7
TOTAL DEPOSITS	mil. $	January	3,160.2	−12.2	−18.6
TOTAL LOANS	mil. $	January	62.5	−33.0	NA
MORTGAGE LOANS	mil. $	January	51.3	−34.0	−10.5
TAX COLLECTIONS[2]					
STATE	thous. $	Jan.-Mar.	384,474	34.7	10.9
Oahu	thous. $	Jan.-Mar.	330,452	35.1	10.2
Maui County	thous. $	Jan.-Mar.	22,705	28.6	10.2
Hawaii	thous. $	Jan.-Mar.	21,428	32.0	13.4
Kauai	thous. $	Jan.-Mar.	9,961	43.3	32.3

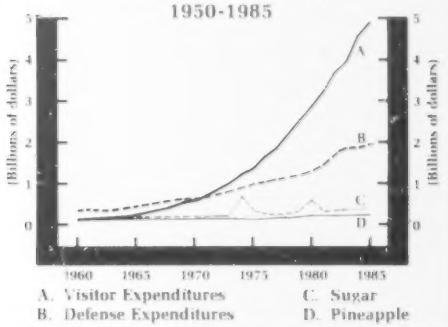
[1]Includes Hawaii and Guam. Reporting categories changed in July, 1985.
[2]Taxes collected by the State Department of Taxation. Excludes property taxes which were formerly collected by the State but are now collected by the Counties.

went over the half-million mark. In addition, using advanced bookings as a gauge of future activity, this summer should see a dramatic influx of visitors.

All in all, the picture for tourism in 1986 looks very bright. Part of the improved performance will be due to comparison with strike-depressed numbers of 1985. But, a good portion of the gains will be real; that is, due to actual gains in the travel market.

What happens in tourism is crucial, since it is the driving force in Hawaii's economy. As seen in Figure 3, over the decades, tourism was the major growth industry, outpacing other sectors such as defense and agriculture. In 1985, visitor spending increased to the point where it was almost double the combined totals of Hawaii's other three major economic activities.

Figure 3
MAJOR EXPORT INDUSTRIES
STATE OF HAWAII
1950-1985



A. Visitor Expenditures
B. Defense Expenditures
C. Sugar
D. Pineapple

Tourists spent almost $5 billion here during 1985. That represents almost 30 percent of the Gross State Product (GSP). In addition, visitor expenditures do not remain only in that industry. Rather, they are re-spent by residents, so that the dollars ripple through almost all sectors of the economy, generating growth in other business areas. When the full impact of tourism is considered, adding the direct and recycled expenditures, the industry comprises well over half of the GSP, and supports one out of every three jobs in the state.

Obviously, the Hawaiian economy relies heavily on this one area, and generally moves in line with tourism's ups and downs. During 1984, when the visitor industry had a great year, most sectors of the economy also had impressive gains. During 1985, when tourism was flat, the various sectors again followed suit.

In 1986, the industry should swing back to strong growth, which should, in turn, stimulate growth in the majority of the state's economic sectors. So, in 1986, the expected rebound in tourism should mean healthy growth for the Hawaiian economy in general.

ECONOMIC INDICATORS

A Bimonthly Report on Current Economic Conditions in Hawaii
by the Research Department, First Hawaiian Bank

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Courtesy Pineapple Growers Association of Hawaii

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Diversified Agriculture in Hawaii

Diversified agriculture is an industry of fundamental importance to Hawaii's economy. This importance is based on a tradition of agricultural practices that date back to the early years of Hawaii's history.

The first major agricultural crops to be developed in Hawaii during the nineteenth century were sugar and pineapple. The dominance of these industries began to decline with the increase in defense spending after the Second World War, and the growth of the visitor industry. These developments created a new urban market for food products as families left sugar and pineapple plantations to move to Honolulu. During that time, fresh vegetables, rice, corn, taro, sweet and Irish potatoes, bananas, avocados, and mangoes were grown in large quantities to supply local markets. The cattle industry, as well as dairying, chicken and egg production, and swine raising also expanded in response to local consumption demands during that period.

Diversified agriculture grew steadily. During the late forties, diversified agricultural crops utilized 12,940 acres of land, and earned about $8 million in terms of farm value of sales. By the mid eighties, 35 years later, diversified agriculture production occupied 42,600 acres of land, and earned $121 million in terms of value of crop sales. Combined with livestock production, diversified agriculture is now a $208 million industry, making it twice the size of the pineapple industry and almost as large as the sugar industry, in terms of wholesale value of sales.

In recent years, diversified agriculture has grown principally in response to the demands of a growing export market. Production for domestic consumption in such crops as vegetables, taro, and rice declined as export crops such as macadamia nuts and papayas saw strong growth to become today's leaders. In addition to flowers and nursery products, these three industries comprised 65 percent of all diversified agricultural crop sales in Hawaii in 1984.

Macadamia nuts were first introduced into Hawaii from Australia before the turn of the century. Commercial production began with 300 acres of planted orchards in 1927. By 1984, the industry covered 16,900 acres of land and produced 18,850 tons of output, valued at $26 million.

Papayas have been grown commercially for a long time. But, it was not until the introduction of the solo variety, with its smaller size and superior taste, that the development of an export industry began. From about 320 acres in 1940, papaya production expanded until it covered 2,590 acres and produced about 40,250 tons of output, valued at $9 million in 1984.

Flowers and nursery products, including anthuriums and potted foliage plants, developed more recently than papayas or macadamia nuts. Horticultural crop sales increased from $2 million to $43 million between 1959 and 1984. Potted plants constitute the largest segment of the industry accounting for $14 million in sales in 1984. Anthuriums are the second largest segment at $7 million, followed by dendrobium orchids, roses, and carnations. Also, a growing market is developing for rooted cuttings, which are shipped to the mainland to be grown as house plants.

Future growth for diversified agricultural crops will most likely continue to concentrate on crops grown for export rather than local consumption. But, growth in Hawaii's export markets will depend on shifting the primary concern from production problems to market development, particularly for Hawaii's lesser known tropical fruits.

The overall picture for diversified agriculture looks promising. Newer crops such as ginger root and guava have grown impressively. The coffee industry has seen a significant turnaround in the last two years. The drying of fruit, such as papayas and bananas, promises to expand demand for off-grade fruit that could be transformed into high-grade dried products. Farmers cooperatives on the Neighbor Islands are developing better growing schedules and distribution arrangements with produce wholesalers. Advances in the irradication of the fruit-fly larvae could boost papaya production and open up whole new areas of growth for exports (see Inside Feature Story).

However, much of diversified agriculture's future will depend on the growing availability of land, water, and capital. Both the land and water issues will be affected by the results of the Land Evaluation and Site Assessment Commission Report and the proposed State Water Code. Programs such as the state agricultural loan program could be expanded, as well as the agricultural park program.

For the export crops, improved marketing and distribution is critical. Examples include increased public and private-sector coordination in market development, product promotion, and distribution systems. One advantage is the strong institutional support for agriculture provided by the University of Hawaii College of Tropical Agriculture, and the State Department of Agriculture.

The challenges to the continued expansion of the industry are formidable. But, the continuing commitment of the state and county governments of Hawaii and the legacy of Hawaii's agricultural tradition speak well for diversified agriculture's continuing contribution to employment and economic development in Hawaii.

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JULY/AUGUST FEATURE STORY: IRRADIATION AND DIVERSIFIED AGRICULTURE IN HAWAII

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CURRENT BUSINESS TRENDS

Recent statistics suggest 1986 will be a banner year for tourism. The number of visitors staying overnight or longer in May was 451,260, an increase of 28 percent over the same month last year. This large increase is partly due to the effect of the United Airlines strike in 1985 which had a negative impact on the industry last year. But other figures signal 1986 to be a good year for the tourism industry. For example, between January and May, the cumulative number of visitors arriving in the state increased by 11 percent over the same period last year, a performance unmatched since early 1984.

A further indication of the good performance of the tourism industry is the increase in hotel occupancy rates. Hotel occupancy through the first five months of the year increased by 3.5 percent to an average rate of 84 percent in the state. Maui leads all the islands with an average occupancy rate of 88 percent during the same period.

Sugar continues to maintain its strong performance. Between January and April, sugar production increased to 204,000 tons, a 9-percent increase over the same period last year. Sugar prices, on the other hand, suffered a ½ percent decline. Employment in the sugar mills and fields in May 1986 was up 1.4 percent from the previous month.

The pineapple industry's sluggishness continued through May with fresh pineapple shipments equal to 101,600 pounds, a 5-percent decline over the same period last year. Employment in the cannery and pineapple fields in May, however, increased by 8 percent over the previous month bringing the number of workers in the industry back to the May 1985 level.

Diversified agriculture as a whole did relatively well, increasing the number of jobs to 8,000. This gain in the industry's employment represents an increase of 3 percent over the previous month

u. s. economic indicators

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
GROSS NATIONAL PRODUCT**					
In Current Dollars	bil. $	1st Qtr.	4,121 r	1.5	5.2
In 1982 Dollars	bil. $	1st Qtr.	3,624 r	0.9	2.1
PERSONAL INCOME**	bil. $	April	3,447p	1.2	4.8
INTEREST RATES					
AVERAGE PRIME RATE	percent	May	8.50	−3.7	−17.6
CONSTRUCTION					
CONSTRUCTION PUT IN PLACE**	bil. $	April	356.7p	0.8	4.3
CONSTRUCTION COST INDEXES					
Residences	1967 = 100	March	372.4	0.1¹	2.0
Apts. Hotels, Office Bldgs	1967 = 100	March	370.4	0.1¹	1.6
EMPLOYMENT					
CIVILIAN EMPLOYMENT*	thous.	April	108,892	0.1	1.9
UNEMPLOYMENT*	thous.	April	8,342	−0.9	−0.5
UNEMPLOYMENT RATE*	percent	April	7.0	−1.4	−2.8
PRICES					
CONSUMER PRICE INDEXES					
Wage Earners and Clerical Workers	1967 = 100	May	321.4	0.3	1.1
All Urban Consumers	1967 = 100	May	326.3	0.3	1.6
PRODUCER PRICE INDEXES					
Finished Goods*	1967 = 100	April	286.8	−0.6	−2.3
All Commodities	1967 = 100	April	297.9	−0.8	−3.7

p = preliminary.
r = Revised figure.
¹Compared to January, 1986.
*Seasonally adjusted.
**Seasonally adjusted at annual rates.

business activity in hawaii

	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
BUSINESS SALES					
GROSS BUSINESS RECEIPTS					
STATE	mil. $	Jan.-Apr.	8,844.9	.....	4.7
Oahu	mil. $	Jan.-Apr.	7,400.0	.....	4.6
Maui County	mil. $	Jan.-Apr.	647.5	.....	4.5
Hawaii	mil. $	Jan.-Apr.	557.6	.....	−2.6
Kauai	mil. $	Jan.-Apr.	239.8	.....	34.6
DIVERSIFIED MANUFACTURING	mil. $	Jan.-Apr.	181.0	.....	8.0
DIVERSIFIED AGRICULTURE	mil. $	Jan.-Apr.	85.4	.....	−9.1
RETAILING	mil. $	Jan.-Apr.	3,245.3	.....	7.0
WHOLESALING	mil. $	Jan.-Apr.	2,114.7	.....	−1.6
SERVICES	mil. $	Jan.-Apr.	2,144.5	.....	3.2
OAHU NEW CAR SALES	number	Jan.-May	14,070p	.....	−13.1
HONOLULU PRICES					
HONOLULU CONSUMER PRICE INDEX					
Wage Earners and Clerical Workers	1967 = 100	June	306.5	0.2¹	2.0
All Urban Consumers	1967 = 100	June	299.2	−0.3¹	1.9
TOURISM					
VISITOR EXPENDITURES	mil. $	1985	4,900p	.....	6.9
OVERNIGHT OR LONGER VISITORS	number	May	451,260p	−0.1	28.4
	number	Jan.-May	2,289,970p	.....	11.3
Westbound	number	May	349,460p	−0.8	34.1
	number	Jan.-May	1,790,130p	.....	12.8
Eastbound	number	May	101,800p	2.2	12.0
	number	Jan.-May	499,840p	.....	6.1
AVERAGE DAILY VISITOR CENSUS	number	Jan.-May	120,600p	.....	11.4
AVERAGE LENGTH OF STAY	no. of days	Jan.-May	10.3p	.....	0.0
MEETING ATTENDANCE	number	Jan.-Feb.	39,453	.....	−24.7
ORGANIZED GROUP TOURS	number	Jan.-May	396,010p	.....	1.9
VISITOR COUNT BY COUNTY*					
Oahu	number	May	253,340p	0.9	27.0
	number	Jan.-May	1,290,100p	.....	9.3
Maui County	number	May	163,680p	−5.6	26.9
	number	Jan.-May	851,150p	.....	4.9
Hawaii	number	May	59,880p	−9.1	36.3
	number	Jan.-May	339,970p	.....	11.2
Kauai	number	May	86,640p	1.2	36.8
	number	Jan.-May	419,190p	.....	17.9

p = preliminary.
¹Compared to April, 1986.
*Estimated Westbound.

business activity in hawaii [cont.]

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
VISITOR ACCOMMODATIONS					
STATE	number	Feb., 1986	66,308	.....	0.6
Oahu	number	Feb., 1986	39,010	.....	1.1
Waikiki	number	Feb., 1986	34,650	.....	2.3
Maui (Island)	number	Feb., 1986	13,451	.....	−0.5
Molokai	number	Feb., 1986	635	.....	1.3
Lanai	number	Feb., 1986	10	.....	0.0
Hawaii	number	Feb., 1986	7,280	.....	−3.1
Kauai	number	Feb., 1986	5,922	.....	4.7
HOTEL OCCUPANCY					
STATE	percent	May	77.5	−4.0	15.0
		Jan.-May	83.6	.....	3.5
Oahu	percent	May	79.9	−3.0	13.0
		Jan.-May	86.2	.....	2.0
Maui (Island)	percent	May	83.5	−7.4	11.6
		Jan.-May	87.5	.....	2.9
Hawaii	percent	May	55.6	−8.4	20.1
		Jan.-May	66.7	.....	4.1
Kauai	percent	May	80.1	4.8	32.4
		Jan.-May	82.0	.....	14.0
DEFENSE EXPENDITURES					
APPROPRIATED FUNDS TOTAL	mil. $	1st Qtr.	437.6	.....	−9.8
Military Payroll	mil. $	1st Qtr.	164.1	.....	−24.4
Civilian Payroll	mil. $	1st Qtr.	143.9	.....	1.9
Local Purchases	mil. $	1st Qtr.	129.6	.....	2.3
SUGAR					
VALUE OF CROP SALES					
(Unprocessed Cane)	mil. $	1984	256.2	.....	−4.0
SUGAR PRODUCTION	thous. tons	Jan.-Apr.	204.0	.....	9.1
AVERAGE N. Y. RAW SUGAR PRICE	$/ton	Jan.-May	414.2p	.....	−0.5
PINEAPPLE					
VALUE OF CROP SALES					
(Fresh Equivalent)	thous. $	1985	90.2	.....	0.3
SHIPMENTS: FRESH	thous. lbs.	Jan.-May	101.6	.....	−5.2
DIVERSIFIED AGRICULTURE					
CROPS	thous. $	1984	120,756	.....	5.3
FLOWERS & NURSERY PRODUCTS	thous. $	1984	42,905	.....	18.6
Anthurium Outshipments*	th. dozens	Jan.-Apr.	484.8	.....	17.5
Potted Foliage Plants	thous. $	1984	14,050	.....	29.7
FRUITS & NUTS	thous. $	1984	39,749	.....	3.2
Papaya Sales	th. lbs.	Jan.-May	20,655	.....	−0.6
Average Farm Price	cents/lb.	May	21.0	5.0	−0.9
Macadamia Nut Sales (in shell)	th. lbs.	1985	37,000	.....	−1.9
Average Farm Price	cents/lb.	1985	70.0	.....	1.2
VEGETABLES AND MELONS*	th. lbs.	Jan.-May	26,820p	.....	−1.1
LIVESTOCK	thous. $	1984	87,025	.....	0.6
BEEF PRODUCTION (Dressed Wt.)	th. lbs.	Jan.-Apr.	11,330	.....	10.0
Average Farm Price (Feedlot Beef)	cents/lb.	April	80.0	2.6	−8.6
HOG PRODUCTION (Dressed Wt.)	th. lbs.	Jan.-Apr.	1,982	.....	−1.3
Average Farm Price	cents/lb.	April	103.5	−2.4	−0.5
MILK PRODUCTION	mil. lbs.	Jan.-Apr.	52.9	.....	10.2
Average Price Sold to Plants	$/100 lbs.	April	19.61	−2.9	−3.1
EGG PRODUCTION	mil.	Jan.-Apr.	76.8	.....	8.2
Average Farm Price	cents/doz.	April	80.0	0.0	−5.9
PUBLIC UTILITIES					
ELECTRICITY GENERATED	mil. kwh.	Jan.-May	2,979.7	.....	5.9
GAS SALES	th. therms.	Jan.-May	20,609	.....	−1.5
TELEPHONE LINES IN SERVICE	thous.	Jan.-May	468.9	.....	2.0

p = preliminary.
*From Hawaii County.
*Includes snap beans, cabbage, celery, sweet corn, cucumbers, lettuce, onions, green peppers, tomatoes, and watermelons.

and 10 percent over the same month last year. Anthurium outshipments increased by over 17 percent through April with a total of 484,000 dozens being exported. Both papaya sales and the average farm price of papayas declined less than 1 percent. Vegetable and melons experienced a slight decline of about 1 percent from 24,107 thousand pounds during January through May 1985 to 26,820 thousand pounds in the first five months of 1986.

Livestock did well through the first four months of 1986. During the period between January and April, beef production amounted to 11,330,000 dressed weight pounds, an increase of 10 percent from the same four-month period in 1985. Hog farmers fared less well, experiencing a slight decline of 1.3 percent in production and a decline in the average farm price of less than 1 percent, as well. Milk producers did well with a 10-percent increase in milk production to 53 million pounds of milk at an average price of $20 per hundred pounds, a 3-percent decline in price from the previous year. The egg industry also did well increasing their production to 76.8 million eggs, an increase of 8 percent. The average farm price of eggs, however, declined to 80 cents per dozen, a decline of almost 6 percent over the preceding year.

The low interest rates being offered in the economy has led to a burst in housing resales and the construction market. Resale of single-family units increased by 18 percent and condominiums by 14 percent in the state. The largest increase in the number of resales occurred in Kauai with the number of single-family resales increasing by 126 percent over the previous year and the number of condominium unit resales increasing by 84 percent. Real estate resales increased on all other islands as well.

Construction-put-in-place was also stimulated by the decline in the cost of credit. In the state, construction-put-in-place through the month of April increased by almost 50 percent over the previous period last year. Again, the largest gain occurred in Kauai which increased by 73 percent.

The economic upswing of 1986 is evident by the improvement in the employment statistics. In the state, the unemployment rate declined from 5.9 percent in April to 5 percent in May. Within each county, the percent of labor force unemployed declined, but Oahu with 4.5 percent of its labor force unemployed boasted the lowest unemployment rate during the month of May. The Big Island recorded the highest level of unemployment with an unemployment rate of 8.1 percent.

IRRADIATION AND DIVERSIFIED AGRICULTURE IN HAWAII

Diversified agriculture in general and the papaya industry in particular have suffered numerous setbacks in recent years. Their problems began with the crop devastation caused by the phytophthora fungus. Then Hurricane Iwa struck in 1982. Many papaya growers, ruined by the storm, spent most of 1983 replanting their trees. The result was a bumper crop in 1984 that flooded the market, driving the price of papaya down to 13 cents per pound, compared to the 15 cents per pound it cost farmers to produce papaya. The lower papaya prices, in turn, discouraged further planting. As a result, papaya production in 1985 declined by 28 percent from the 1984 level of 67 million pounds.

Problems in the eradication of fruit-fly larvae infestation have also added to the difficulties of the industry. In September 1984, the federal government banned the use of the fumigant ethylene dibromide (EDB) for the treatment of fruit before shipment to the mainland following a major med-fly epidemic in California. Since then, several alternatives were explored to meet federal quarantine requirements, including: the hot treatment/cold storage process for papaya shipped by surface, the double-dip process, the vapor-heat process, the annihilation of male flies, the release of sterile insects, genetic modification of fruit flies, aerial spraying of insecticides, and irradiation.

The "double-dip" treatment was the first alternative receiving wide application. Papayas are immersed in 108-degree water for 40 minutes, followed by a 20-minute dip in 120-degree water. This method requires that papayas are harvested when they are less than one-quarter ripe, and consequently, more frequent trips to the field by the farmer to prevent the fruit from getting too ripe on the tree. With this method the fruit often becomes lumpy or hard. Some of the papayas sent to the Mainland failed to ripen after the treatment. As a result, sales plummeted. The industry then requested permission from the federal government to shorten the length of the dips. A less severe hot-water dipping method was recently approved by the U.S. Department of Agriculture (U.S.D.A.), where the length of the first dip was reduced from 40 to 30 minutes.

Like "double-dipping," the vapor heat treatment is a nonchemical process currently used to kill fruit-fly larvae. This process was developed in response to a ban on EDB treatment for fruit exported to Japan. Fruits are first subjected

business activity in hawaii [cont.]

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
CONSTRUCTION PUT IN PLACE					
STATE	thous. $	Jan.-Apr.	577,949	.....	49.4
Oahu	thous. $	Jan.-Apr.	504,625	.....	53.6
Maui County	thous. $	Jan.-Apr.	29,902	.....	38.0
Hawaii	thous. $	Jan.-Apr.	29,740	.....	3.3
Kauai	thous. $	Jan.-Apr.	13,682	.....	72.8
HONOLULU CONSTRUCTION COST INDEXES					
SINGLE FAMILY	1967 = 100	June	368.9	0.6	3.5
HIGH-RISE	1967 = 100	June	385.6	0.1	3.4
PRIVATE PERMITS AUTHORIZED					
STATE: RESIDENTIAL	thous. $	January	57,805	.....	75.9
Single Family Units	number	January	267	.....	14.6
Multiple Family Units	number	January	492	.....	154.9
NONRESIDENTIAL	thous. $	January	53,941	.....	136.1
OAHU: RESIDENTIAL	thous. $	Jan.-May	143,548	.....	11.4
Single Family Units	number	Jan.-May	638	.....	−17.8
Multiple Family Units	number	Jan.-May	1,435	.....	29.4
NONRESIDENTIAL	thous. $	Jan.-May	76,690	.....	60.5
MAUI CO.: RESIDENTIAL	thous. $	January	6,801	.....	99.0
Single Family Units	number	January	66	.....	69.2
Multiple Family Units	number	January	16	.....	77.8
NONRESIDENTIAL	thous. $	January	3,302	.....	134.5
HAWAII: RESIDENTIAL	thous. $	Jan.-May	26,472	.....	−40.6
Single Family Units	number	Jan.-May	444	.....	10.4
Multiple Family Units	number	Jan.-May	8	.....	−94.0
NONRESIDENTIAL	thous. $	Jan.-May	44,534	.....	188.1
KAUAI: RESIDENTIAL	thous. $	Jan.-May	14,579	.....	−18.7
Single Family Units	number	Jan.-May	153	.....	1.3
Multiple Family Units	number	Jan.-May	0	.....	−100.0
NONRESIDENTIAL	thous. $	Jan.-May	37,614	.....	646.6
PUBLIC CONTRACTS AWARDED					
TOTAL GOVERNMENT PROJECTS:					
STATE	thous. $	Jan.-May	154,694	.....	63.3
Oahu	thous. $	Jan.-May	112,737	.....	81.4
Maui County	thous. $	Jan.-May	24,717	.....	19.2
Hawaii	thous. $	Jan.-May	12,677	.....	169.4
Kauai	thous. $	Jan.-May	4,565	.....	−36.1
BY LEVEL OF GOVERNMENT:					
Federal	thous. $	Jan.-May	21,937	.....	−1.7
State	thous. $	Jan.-May	80,417	.....	152.9
County	thous. $	Jan.-May	52,340	.....	28.8
REAL ESTATE RESALES					
STATE: Single Family	number	Jan.-May	1,125	.....	17.6
Average Price	dollars	Jan.-May	178,462	.....	7.9
Condominium	number	Jan.-May	1,474	.....	14.4
Average Price	dollars	Jan.-May	110,791	.....	6.5
OAHU: Single Family	number	Jan.-May	744	.....	6.0
Average Price	dollars	Jan.-May	204,650	.....	13.1
Condominium	number	Jan.-May	1,114	.....	6.7
Average Price	dollars	Jan.-May	103,831	.....	5.4
MAUI CO.: Single Family	number	Jan.-May	140	.....	37.3
Average Price	dollars	Jan.-May	162,181	.....	5.8
Condominium	number	Jan.-May	250	.....	47.9
Average Price	dollars	Jan.-May	149,559	.....	8.9
HAWAII: Single Family	number	Jan.-May	189	.....	45.4
Average Price	dollars	Jan.-May	96,141	.....	3.5
Condominium	number	Jan.-May	51	.....	18.6
Average Price	dollars	Jan.-May	81,720	.....	−9.7
KAUAI: Single Family	number	Jan.-May	52	.....	126.1
Average Price	dollars	Jan.-May	146,804	.....	−4.2
Condominium	number	Jan.-May	59	.....	84.4
Average Price	dollars	Jan.-May	103,055	.....	−17.4

p = preliminary.

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population in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
POPULATION					
STATE:					
Total De Facto Population	thous.	July 1, 1985	1,149.9p	.....	0.9
Total Resident Population	thous.	July 1, 1985	1,053.9p	.....	1.6
OAHU:					
Total De Facto Population	thous.	July 1, 1984	859.8	.....	1.5
Total Resident Population	thous.	July 1, 1985	809.9p	.....	0.6
MAUI COUNTY:					
Total De Facto Population	thous.	July 1, 1984	114.5	.....	10.3
Total Resident Population	thous.	July 1, 1985	86.7p	.....	4.3
HAWAII:					
Total De Facto Population	thous.	July 1, 1984	112.5	.....	1.7
Total Resident Population	thous.	July 1, 1985	111.0p	.....	4.3
KAUAI:					
Total De Facto Population	thous.	July 1, 1984	54.4	.....	7.3
Total Resident Population	thous.	July 1, 1985	46.4p	.....	5.5
CIVILIAN RESIDENT POPULATION					
STATE	thous.	July 1, 1985	997.5p	.....	1.8
MILITARY PERSONNEL:					
STATE	number	July 1, 1985	58,005p	.....	−4.6
Ashore	number	July 1, 1985	53,848p	.....	−4.4
Afloat	number	July 1, 1985	4,157p	.....	−7.3
CIVILIAN MILITARY DEPENDENTS	number	July 1, 1985	64,281p	.....	−4.2
FOREIGN IMMIGRATION*	number	Jan.-June	2,408	.....	6.6

p = preliminary.
*Includes only those entering Honolulu ports and does not include status changes.

income in hawaii

INCOME					
TOTAL PERSONAL INCOME**	mil. $	4th Qtr. 1985	14,582	1.7	5.5
EMPLOYMENT INCOME*	mil. $	4th Qtr. 1985	10,697	2.2	7.3
Manufacturing	mil. $	4th Qtr. 1985	499	4.4	6.6
Construction & Mining	mil. $	4th Qtr. 1985	604	2.5	41.5
Wholesale	mil. $	4th Qtr. 1985	463	1.3	10.0
Retail	mil. $	4th Qtr. 1985	1,182	0.3	3.0
Finance, Ins., & Real Estate	mil. $	4th Qtr. 1985	705	2.3	5.1
Trans., Comm., & Util.	mil. $	4th Qtr. 1985	953	2.9	5.8
Services	mil. $	4th Qtr. 1985	2,487	2.9	9.1
Farm & Other	mil. $	4th Qtr. 1985	336	7.3	−2.9
Federal Civilian	mil. $	4th Qtr. 1985	959	0.1	2.8
Federal Military	mil. $	4th Qtr. 1985	1,329	4.3	8.0
State & Local	mil. $	4th Qtr. 1985	1,181	−0.1	3.4
PROPERTY INCOME					
(Dividends, Interest, & Rent)	mil. $	4th Qtr. 1985	2,711	0.7	1.2
TRANSFER PAYMENTS					
(1,906) minus Personal Contributions for Social Insurance (732)	mil. $	4th Qtr. 1985	1,174	−1.2	−0.4
PER CAPITA PERSONAL INCOME					
STATE	dollars	1984	13,042	.....	5.6
Oahu	dollars	1984	13,709	.....	5.7
Maui County	dollars	1984	11,611	.....	5.9
Hawaii	dollars	1984	9,998	.....	5.2
Kauai	dollars	1984	10,564	.....	6.9

**Total personal income and all components are seasonally adjusted at annual rates.
*Includes wage and salary disbursements, proprietors' income, and other labor income.
p = preliminary.

AWAIIAN BANK

to warm-water steam, and then cooled down with a cool-water shower. The complete process takes about six hours. According to the *Pacific Business News*, the Diamond Head Papaya Company has spent approximately $1.7 million in the construction and testing of its vapor-heat facility on the Big Island. Once in operation, the plant can process about one million pounds of papayas a month.

The male-fly annihilation method involves the killing of male flies with a toxicant-lure bait. The lures are synthetic female pheromones (sexual hormones), which are extremely attractive to the male flies. The lures are mixed with the toxicant malathion or dibrom (naled), which kills the fly instantly on contact. As the male flies are gradually killed, matings are reduced, leading to a decline in the fruit-fly population. This method has the advantage of reducing accidental poisoning of other species. However, only one lure has enjoyed success as an attracting agent.

The sterile-insect release method (SIRM) involves the repeated release of sterile male fruit flies, in massive quantities, to compete with the wild male population for mates. Females who mate with sterile males will not reproduce, thereby reducing the fruit-fly population. Success has been limited, however, mainly because laboratory-sterilized males are not as aggressive in breeding as their wild male counterparts. This method involves no use of pesticides; although, to make the method effective, malathion sprays are often used to reduce the fruit-fly population prior to large sterile male releases.

Through its genetic research, scientists from the Hawaii Biotechnology Group (HBG) have recently discovered a mutant Mediterranean fruit fly that might hold the key to the complete eradication of the Med-fly population. The approach involves mutating female flies in such a way that, given a particular food additive, it will act as a poison and kill them. HBG scientists are optimistic that the technique will be perfected within the next few months, followed shortly by field tests. Commercial application of the technique is projected for early 1989.

Of all the alternatives, the federal tri-fly eradication proposal is the most controversial. In response to pressures from agricultural interests from mainland states such as California and Texas, the U.S. Department of Agriculture proposed to eradicate the three strains of fruit flies found in Hawaii by aerial spraying of insecticides, chiefly malathion. The reported motive behind this tri-fly eradication program was not

so much to help Hawaii's diversified agriculture, but rather, to protect California's $13 billion agricultural industry from Hawaii's fruit flies.

While Hawaii stands to benefit from the eradication of the flies, the aerial spraying strategy has drawn criticism from Hawaii residents, state agencies, and the Environmental Protection Agency (EPA). The state Department of Agriculture has firmly opposed the plan for two reasons. First, the economics don't make sense. The plan would reportedly cost at least $86 million, and could reach as high as $167 million. The industries affected by fruit flies (pineapple and sugar are not affected) generate only about $8 million in revenues. Second, blanket aerial spraying of pesticides would indiscriminately endanger indigenous species of insects and birds. The EPA also objected strongly to the aerial spraying plan for the following reasons: First, the use of the pesticides malathion, diazinon and naled is illegal since they are not registered for such applications. Second, aerial spraying might leave pesticide residue in food crops such as lichee, breadfruit, bananas, and sugarcane. Third, surface, well, and coastal water might be contaminated by aerial spraying. The EPA also questioned the effectiveness of aerial spraying. Unlike California, Hawaii has deep valleys and ridges that are out of reach to aerial spraying of insecticides. As a result, pockets of fruit flies would survive, reducing the effectiveness of aerial spraying.

Concern about the health and environmental hazards of pesticide use prompted researchers to continue their search for a permanent solution to the fruit-fly infestation problem. The answer may be found in the irradiation method recently approved by the U.S. Food and Drug Administration. The technique has been used commercially in more than 20 countries for several years. The Dutch, for example, irradiate their cocoa, shrimp, and frog legs. Japan uses irradiation to treat potatoes to prevent them from sprouting. South Africa employs the technique on mangoes to delay ripening and control mould. Food irradiation is also used in Canada, Great Britain, the Soviet Union, the Netherlands, and a number of other countries.

In the U.S., the use of irradiation has been limited. But, the process is hardly new. For years, American astronauts traveling in space have consumed foods preserved by nuclear radiation. Irradiation of wheat products, has been approved by the U.S. Food and Drug Administration (FDA) since 1964. Since then, the process has been authorized

employment and jobs in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
EMPLOYMENT					
STATE					
Civilian Labor Force	thous.	May	499.0p	−0.5	3.1
Employment	thous.	May	473.9p	0.3	3.1
Unemployment	thous.	May	25.1p	−14.8	3.7
Unemployment Rate	percent	May	5.0p	−15.3	0.0
OAHU					
Civilian Labor Force	thous.	May	375.7p	−0.6	1.8
Employment	thous.	May	358.9p	0.1	1.9
Unemployment	thous.	May	16.8p	−14.3	−0.3
Unemployment Rate	percent	May	4.5p	−13.5	−2.2
MAUI COUNTY					
Civilian Labor Force	thous.	May	47.7p	−0.1	6.0
Employment	thous.	May	45.1p	1.1	5.6
Unemployment	thous.	May	2.6p	−19.0	13.3
Unemployment Rate	percent	May	5.3p	−19.7	6.0
HAWAII					
Civilian Labor Force	thous.	May	52.6p	−0.5	9.8
Employment	thous.	May	48.3p	0.9	9.5
Unemployment	thous.	May	4.3p	−14.0	13.2
Unemployment Rate	percent	May	8.1p	−14.7	1.2
KAUAI					
Civilian Labor Force	thous.	May	23.1p	−0.4	4.3
Employment	thous.	May	21.6p	0.5	3.6
Unemployment	thous.	May	1.5p	−14.3	15.4
Unemployment Rate	percent	May	6.4p	−13.5	6.7
JOB COUNT BY INDUSTRY					
TOTAL JOBS—STATE	thous.	May	477.7p	0.	3.6
SUGAR (Mill and Field)	thous.	May	7.4p	1.4	−1.3
PINEAPPLE (Cannery and Field)	thous.	May	4.1p	7.9	0.0
DIVERSIFIED MANUFACTURING (Excluding Sugar and Pineapple)	thous.	May	16.6p	−0.3	6.1
Durable Goods	thous.	May	3.4p	−2.9	17.2
Non-Durable Goods	thous.	May	13.2p	−0.4	3.5
Apparel and Textiles	thous.	May	3.5p	0.0	12.9
DIVERSIFIED AGRICULTURE (Excluding Sugar And Pineapple but including Agricultural Self-Employed)	thous.	May	8.0p	3.2	10.4
CONTRACT CONSTRUCTION	thous.	May	16.7p	3.7	−10.2
TRANSPORTATION	thous.	May	24.5p	0.4	9.4
COMMUNICATION	thous.	May	7.1p	−1.4	−4.1
UTILITIES	thous.	May	2.5p	0.0	0.0
RETAIL TRADE	thous.	May	96.7p	−0.3	3.2
WHOLESALE TRADE	thous.	May	19.7p	−0.3	2.9
FINANCE, INSURANCE AND REAL ESTATE	thous.	May	32.5p	−0.3	0.9
HOTEL SERVICES—STATE	thous.	May	28.0p	−0.2	−3.1
Oahu	thous.	May	16.3p	−0.3	1.6
Maui County	thous.	May	6.0p	0.8	−11.2
Hawaii	thous.	May	3.5p	−1.4	−10.4
Kauai	thous.	May	2.3p	0.0	0.0
OTHER SERVICES	thous.	May	84.7p	0.1	4.3
FEDERAL GOVERNMENT	thous.	May	32.0p	−0.3	−1.8
Civilian Agencies	thous.	May	11.6p	0.9	−0.9
Defense Department	thous.	May	20.5p	−0.5	−1.9
STATE GOVERNMENT	thous.	May	50.9p	0.6	2.4
COUNTY GOVERNMENT	thous.	May	12.7p	0.8	0.8
NON-AGRICULTURE SELF-EMPLOYED	thous.	May	34.0p	−1.7	31.3
UNEMPLOYMENT INSURANCE					
INSURED UNEMPLOYMENT (Weekly Average)	number	May	8,554	−13.4	−12.5
INTRASTATE INITIAL CLAIMS	number	May	4,840	−25.2	−23.6
INTERSTATE INITIAL CLAIMS	number	May	307	−11.3	2.3
UNEMPLOYMENT INSURANCE BENEFITS	thous. $	May	4,835	−10.0	−6.5

p = preliminary.

public assistance in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
PUBLIC ASSISTANCE					
INCOME MAINTENANCE:					
Recipients[1]	no./persons	May	55,162	−0.4	−6.6
Payments	thous. $	Jan.-May	38,877	.....	−5.6
MEDICAL ASSISTANCE:					
Recipients[1]	no./patients	May	51,079	11.9	−1.1
Payments	thous. $	Jan.-May	62,207	.....	−16.8
FOOD STAMPS:					
Recipients[1]	no./persons	April	92,050	0.5	−7.0
Payments	thous. $	Jan.-Apr.	29,860	.....	−4.5
SERVICES:					
Recipients[1]	no./cases	1st Qtr.	7,795	3.7	12.5
Payments	thous. $	1st Qtr.	4,246	.....	19.1

[1]*Count of recipients is duplicated. A person may be counted in each category.*

banking and finance in hawaii

FINANCE					
COMMERCIAL BANK DEPOSITS:					
STATE:					
Total Deposits	mil. $	April	7,577.9	0.2	12.7
Debits To Demand Deposits	mil. $	April	9,208.4	15.3	10.0
OAHU:					
Total Deposits	mil. $	April	6,303.4	0.8	13.9
Debits To Demand Deposits	mil. $	April	8,310.5	15.3	9.7
MAUI COUNTY:					
Total Deposits	mil. $	April	488.4	−1.5	8.7
Debits To Demand Deposits	mil. $	April	387.9	18.9	9.5
HAWAII:					
Total Deposits	mil. $	April	526.2	−5.3	5.7
Debits To Demand Deposits	mil. $	April	354.5	14.9	11.2
KAUAI:					
Total Deposits	mil. $	April	260.0	−0.6	7.7
Debits To Demand Deposits	mil. $	April	155.5	9.7	22.1
BANK LOANS OUTSTANDING — STATE	mil. $	1st Qtr.	4,719.7	2.3	10.8
Real Estate	mil. $	1st Qtr.	1,896.8	0.8	12.1
Consumer	mil. $	1st Qtr.	1,044.1	−1.0	5.8
Commercial & Industrial	mil. $	1st Qtr.	1,361.6	1.8	6.8
Other	mil. $	1st Qtr.	417.2	22.4	36.7
CONVENTIONAL HOME MORTGAGE RATES: HONOLULU SAVINGS & LOAN ASSOCIATIONS[1]	percent	May	10.0	−2.0	−22.5
TOTAL DEPOSITS	mil. $	April	3,546.6	−1.7	−1.4
TOTAL LOANS	mil. $	April	95.6	44.4	NA
MORTGAGE LOANS	mil. $	April	82.0	49.4	63.0
TAX COLLECTIONS[2]					
STATE	thous. $	May	147,788	6.4	19.2
Oahu	thous. $	May	126,802	4.3	17.4
Maui County	thous. $	May	11,101	82.2	57.5
Hawaii	thous. $	May	6,824	−4.0	−6.5
Kauai	thous. $	May	3,052	−26.0	79.2

[1]*Includes Hawaii and Guam. Reporting categories changed in July, 1985.*
[2]*Taxes collected by the State Department of Taxation. Excludes property taxes which were formerly collected by the State but are now collected by the Counties.*

for use on potatoes and more than 60 spices and seasonings to prevent infestation. Last summer, the FDA approved the use of irradiation to kill trichinella bacteria in fresh pork. Recently, in April, irradiation was permitted for treating produce. The FDA allows up to 100 kilorads of radiation to kill insects on fruits and vegetables, and to inhibit the spoilage of fresh produce. At the same time, the FDA increased the amount of radiation that can be used on dried herbs and spices from 10 to 30 kilorads.

Unquestionably, safety is the paramount concern with food irradiation. However, at the low radiation levels approved by the FDA, many experts believe that the process is reasonably safe for consumers. In particular, there is a fear that irradiation could catalyze chemical reactions that lead to the formation of carcinogens in the human body. But, thorough experiments, including the feeding of irradiated foods to animals, have failed to find any such cancer-causing reactions. Similar conclusions, supporting the safety of the irradiation process have been reached by such organizations as the World Health Organization, the Food and Agriculture Organization and the International Atomic Energy Agency of the United Nations.

Irradiation does have some disadvantages. Studies have shown that radiation reduces vitamins in irradiated foods. Taste could also suffer. But, these are small sacrifices compared with the much greater benefits that irradiation offers. Appropriate doses of irradiation can delay food ripening, reduce spoilage, prevent sprouting (e.g. in onions and potatoes) and kill worms, insects, and infectious microbes. Unlike pesticides, irradiation leaves no residues, and insects cannot develop a resistance to it. These advantages imply a significant increase in the quantity and quality of the nation's food supply.

In Hawaii, irradiation technology can open the door to a tremendous expansion in diversified agriculture. For the papaya industry, irradiation would cost less than the "double-dip" method and eliminate the disadvantages of early harvesting and lumpy fruit. Irradiation could also open export markets for other fruits such as mangoes, avocado, guava, lichee, breadfruit, and taro. Up to now, these fruits could not be exported because they could not be fumigated. Finally, there is the potential for an expanded market for processed seafood products from Hawaii since irradiation can extend shelf life to three weeks, and thus allow increased exports to Japan and the Mainland.

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Research Department, First Hawaiian Bank | September/October 1986

Alternate Energy in Hawaii

The dramatic decline of oil prices in the first half of 1986 was welcome news for the Hawaiian economy. But the drop also poses a challenge to energy self-sufficiency in Hawaii because of its potentially negative impact on the development of alternate energy sources.

The oil shocks of the 1970s, and the subsequent increase in world oil prices, significantly increased the importance of energy self-sufficiency in Hawaii. The result was the development of commercially feasible renewable energy enterprises at both the public and private levels. Examples are as follows:

Biomass conversion, in which organic material is burned to produce electricity, provided 9 percent of all electricity generated in the state in 1985. Biomass is a major energy source on the neighbor islands, providing 39 percent of total electricity produced on Hawaii, 23 percent on Maui, and 40 percent on Kauai. On Oahu, only a minimal amount of power is provided by this source, but H-POWER, a refuse-to-energy project proposed by the Honolulu City Council, may provide up to 7 percent of Oahu's electrical needs by year 2000. Similar projects are being proposed on Kauai and Maui.

Hydropower, electricity produced by falling water, provides 1 percent of total state electricity produced. On Hawaii, 5 percent of Hawaiian Electric Light Co.'s (HELCO) electrical energy is provided by hydropower. However, on Kauai, 15 percent of the electrical energy is produced from seven hydro plants and three commercial hydro systems are awaiting county approval. Approval of a 3-megawatt plant above Keanae on Maui is pending.

Windpower, electricity generated by harnessing the forces of the wind, provided only 0.2 percent of the electricity produced in the state, but the potential for windpower is considerable. Hawaii, which has some of the best wind regimes in the world, has about 600 power generating windmills. On Oahu, the Kahuku wind farm is one of the largest farms of medium-sized wind turbines in the U.S. On the Big Isle, two commercial wind turbine operators and single wind generators provided 2 percent of total electricity generated. A 20-megawatt windfarm in South Point, Hawaii, and a 10-megawatt windfarm in central Maui are in the planning stages.

Geothermal power is generated when super-heated groundwater under intense pressure is brought to the surface where the pressure is reduced and is allowed to "flash" into steam. It is presently available only on the Big Isle where 3 percent of the electricity produced is derived from this source. Recent contracts by HELCO with commercial geothermal power firms indicate further development of this energy resource in the near future. Maui has a geothermal subzone located on Haleakala's slope, but has yet to establish guidelines for geothermal development.

Ocean thermal energy conversion (OTEC), a process that utilizes the temperature differences between the depths of the ocean to produce electricity, remains in the research stage, but a commercial 50-megawatt OTEC plant at Kahe Point on Oahu is being considered.

The use of solar energy to produce electricity directly has not been fully developed. On Molokai an installation using the sun's rays to generate electricity is under construction. However, solar water heaters have become increasingly common. In 1985, an estimated 39,000 households, representing almost 12 percent of total households, had solar water heating systems.

These alternate energy sources provide about 11 percent of the electrical energy needs of the state. Forecasts of energy self-sufficiency are bright, but the drop in oil prices casts a shadow over the future of this statewide goal.

Energy produced by these sources are purchased by the utility companies at rates based on "avoided cost"; that is, the amount the utility companies would have to pay for oil to produce an equivalent amount of energy. Hence, as the price of oil falls, the price paid to the alternate energy producers declines, and the alternate energy source is no longer profitable. The problem is exacerbated by the recent withdrawal of state and federal energy tax credits.

However, despite the reduced returns on alternate energy projects, interest in energy self-sufficiency remains high. The recent award by the federal government of $1.4 million for advanced OTEC research, co-sponsored with Japan, and $10.2 million for a MOD-5B wind turbine, the federal and state funding of $27 million for a feasibility study of an underwater cable to transmit electricity from the Big Isle to Oahu, and the many county energy projects currently underway indicate a recognition of the need for energy self-sufficiency and the continuing emphasis on its development by all levels of government.

The viability of alternate energy in Hawaii is cushioned somewhat from the oil price drop because of the cost involved in transporting the seaborne fuels. The potential viability of alternate energy in Hawaii is also supported by the private sector's continued interest in geothermal development in Hawaii and Maui, hydropower in Maui and Kauai, and windpower in Hawaii, Oahu, and Molokai.

Thus, it remains encouraging that Hawaii's government and businesses are looking beyond the current low-cost oil situation, and remain committed to a diversified energy base in Hawaii as a long-run economic goal.

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SEPTEMBER/OCTOBER FEATURE STORY: THE LONG-TERM SURVIVAL OF HAWAII'S SUGAR INDUSTRY

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CURRENT BUSINESS TRENDS

Hawaii's real estate market is experiencing a surge of activity in 1986. Spurred on by low interest rates and the new tax reform laws, resales of single-family units and condominiums increased for all islands through the first seven months of the year. The most dramatic gains occurred on Kauai where housing resales increased by 105 percent for single-family units and 94 percent for condominiums. With the exception of condominiums on Hawaii and Kauai, prices of housing units increased on all islands.

The construction industry is also benefitting from the low cost of credit. Construction-put-in-place through the first six months of the year stood at $877 million, a 42-percent increase over the same period last year. Continued activity through the rest of 1986 is indicated by increases in the value of private permits authorized. With the exception of Hawaii and Kauai, the value of permits authorized for residential purposes increased on all islands of the state. On the other hand, the value of private permits authorized for nonresidential facilities increased dramatically for Hawaii and Kauai as a result of the development of the Hyatt Regency Waikoloa and the Westin Kauai.

Tourism continued its healthy pace through July. Visitors staying in Hawaii overnight or longer decreased slightly in July from the previous month. However, on a cumulative basis, 9 percent more visitors visited Hawaii through the first seven months of 1986 compared to the same period last year.

The continuing growth in the visitor industry is also shown by the improvement in hotel occupancies through the first seven months of 1986. The average hotel occupancy rate for the state increased to 82 percent, representing a 4-percent gain over 1985. Oahu, with 86 percent of all its hotel rooms occupied, had the highest occupancy rate among

u. s. economic indicators

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
GROSS NATIONAL PRODUCT**					
In Current Dollars	bil. $	2nd Qtr.	4,180 r	0.7	5.4
In 1982 Dollars	bil. $	2nd Qtr.	3,662 r	0.2	2.6
PERSONAL INCOME**	bil. $	July	3,503p	0.5	5.6
AVERAGE PRIME RATE	percent	August	7.90	−3.2	−16.8
CONSTRUCTION PUT IN PLACE**	bil. $	June	375.1p	0.1	6.3
CONSTRUCTION COST INDEXES:					
Residences	1967 = 100	May	373.0	0.2¹	1.8
Apts., Hotels, Office Bldgs.	1967 = 100	May	371.0	0.2¹	1.6
EMPLOYMENT					
CIVILIAN EMPLOYMENT*	thous.	July	109,882	0.2	2.8
UNEMPLOYMENT*	thous.	July	8,190	−3.0	−2.5
UNEMPLOYMENT RATE*	percent	July	6.8	−2.9	−5.6
PRICES					
CONSUMER PRICE INDEXES:					
Wage Earners and Clerical Workers	1967 = 100	July	322.9	.0	1.2
All Urban Consumers	1967 = 100	July	328.7	0.2	1.8
PRODUCER PRICE INDEXES:					
Finished Goods*	1967 = 100	July	287.3p	−0.4	−2.4
All Commodities	1967 = 100	July	297.7p	−0.4	−3.7

r = revised.
p = preliminary.
¹Compared to March, 1986.
*Seasonally adjusted.
**Seasonally adjusted at annual rates.

business activity in hawaii

BUSINESS SALES					
GROSS BUSINESS RECEIPTS:					
STATE	mil. $	Jan.-June	13,183.7	.....	5.9
Oahu	mil. $	Jan.-June	11,019.6	.....	5.4
Maui County	mil. $	Jan.-June	950.8	.....	6.8
Hawaii	mil. $	Jan.-June	843.5	.....	3.3
Kauai	mil. $	Jan.-June	369.8	.....	27.4
DIVERSIFIED MANUFACTURING	mil. $	Jan.-June	282.7	.....	10.4
DIVERSIFIED AGRICULTURE	mil. $	Jan.-June	126.3	.....	−6.7
RETAILING	mil. $	Jan.-June	4,858.7	.....	7.7
WHOLESALING	mil. $	Jan.-June	3,144.6	.....	−0.1
SERVICES	mil. $	Jan.-June	3,210.0	.....	6.5
OAHU NEW CAR SALES	number	Jan.-June	18,939p	.....	−7.5
HONOLULU PRICES					
HONOLULU CONSUMER PRICE INDEX:					
Wage Earners and Clerical Workers	1967 = 100	June	306.5	0.2¹	2.0
All Urban Consumers	1967 = 100	June	299.2	−0.1¹	1.9
TOURISM					
VISITOR EXPENDITURES	mil. $	1985	4,884p	.....	6.6
OVERNIGHT OR LONGER VISITORS	number	July	494,090p	−2.4	8.7
	number	Jan.-July	3,296,710p	.....	14.3
Westbound	number	July	370,030p	−4.8	6.4
	number	Jan.-July	2,548,210p	.....	15.8
Eastbound	number	July	124,060p	5.6	16.3
	number	Jan.-July	748,500p	.....	9.2
AVERAGE DAILY VISITOR CENSUS	number	Jan.-July	122,590p	.....	14.6
AVERAGE LENGTH OF STAY	no. of days	Jan.-July	10.2p	.....	−1.0
MEETING ATTENDANCE	number	Jan.-June	120,185	.....	−8.6
ORGANIZED GROUP TOURS	number	Jan.-July	532,120	.....	1.7
VISITOR COUNT BY COUNTY²					
Oahu	number	July	287,910p	−4.9	1.9
	number	Jan.-July	1,882,390p	.....	12.2
Maui County	number	July	172,520p	−4.5	4.6
	number	Jan.-July	1,204,240p	.....	9.2
Hawaii	number	July	66,400p	3.5	4.4
	number	Jan.-July	470,540p	.....	13.3
Kauai	number	July	88,260p	−0.8	15.8
	number	Jan.-July	596,670p	.....	21.9

p = preliminary.
¹Compared to April, 1986.
²Estimated Westbound.

business activity in hawaii [cont.]

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
VISITOR ACCOMMODATIONS:					
STATE	number	Feb., 1986	66,308	.....	0.6
Oahu	number	Feb., 1986	39,010	.....	1.1
Waikiki	number	Feb., 1986	34,650	.....	2.3
Maui (Island)	number	Feb., 1986	13,451	.....	−0.5
Molokai	number	Feb., 1986	635	.....	1.3
Lanai	number	Feb., 1986	10	.....	0.0
Hawaii	number	Feb., 1986	7,280	.....	−3.1
Kauai	number	Feb., 1986	5,922	.....	4.7
HOTEL OCCUPANCY:					
STATE	percent	July	79.5	1.8	4.2
		Jan.-July	82.2	.....	5.2
Oahu	percent	July	85.3	−1.3	0.5
		Jan.-July	86.1	.....	3.4
Maui (Island)	percent	July	82.9	6.4	16.6
		Jan.-July	85.4	.....	7.0
Hawaii	percent	July	53.1	3.3	−1.3
		Jan.-July	62.6	.....	6.1
Kauai	percent	July	74.5	11.5	12.9
		Jan.-July	78.5	.....	14.8
DEFENSE EXPENDITURES					
APPROPRIATED FUNDS TOTAL	mil. $	Yr. to 2nd Qtr.	908.7	.....	−13.1
Military Payroll	mil. $	Yr. to 2nd Qtr.	317.9	.....	−26.6
Civilian Payroll	mil. $	Yr. to 2nd Qtr.	309.5	.....	−0.1
Local Purchases	mil. $	Yr. to 2nd Qtr.	227.3	.....	−25.0
SUGAR					
VALUE OF CROP SALES					
(Unprocessed Cane)	mil. $	1985	222.4	.....	−13.2
SUGAR PRODUCTION	thous. tons	Jan.-July	579.2	.....	2.2
AVERAGE N. Y. RAW SUGAR PRICE	$/ton	Jan.-July	415.6p	.....	−0.8
PINEAPPLE					
VALUE OF CROP SALES					
(Fresh Equivalent)	thous. $	1985	90.5	.....	0.7
SHIPMENTS: FRESH	thous. lbs.	Jan.-July	140.9	.....	−7.5
DIVERSIFIED AGRICULTURE					
CROPS	thous. $	1985	132,126	.....	12.6
FLOWERS & NURSERY PRODUCTS	thous. $	1985	44,247	.....	13.7
Anthurium Outshipments*	th. dozens	Jan.-July	968.2	.....	19.5
Potted Foliage Plants	thous. $	1985	12,019	.....	19.6
FRUITS & NUTS	thous. $	1985	43,244	.....	9.7
Papaya Sales	th. lbs.	Jan.-July	28,475	.....	−5.7
Average Farm Price	cents/lb.	July	17.0	0.0	−5.6
Macadamia Nut Sales (in shell)	th. lbs.	1985	42,000	.....	11.4
Average Farm Price	cents/lb.	1985	72.5	.....	4.8
VEGETABLES AND MELONS*	th. lbs.	Jan.-July	41,462p	.....	1.5
LIVESTOCK	thous. $	1985	82,821	.....	−4.8
BEEF PRODUCTION (Dressed Wt.)	th. lbs.	Jan.-July	19,250	.....	−3.0
Average Farm Price (Feedlot Beef)	cents/lb.	July	79.0	3.3	−4.8
HOG PRODUCTION (Dressed Wt.)	th. lbs.	Jan.-July	3,578	.....	0.6
Average Farm Price	cents/lb.	July	103.0	0.0	0.0
MILK PRODUCTION	mil. lbs.	Jan.-July	93.4	.....	10.7
Average Price Sold to Plants	$/100 lbs.	July	19.17	2.2	−4.4
EGG PRODUCTION	mil.	Jan.-July	133.5	.....	5.1
Average Farm Price	cents/doz.	July	76.5	−1.3	10.1
PUBLIC UTILITIES					
ELECTRICITY GENERATED	mil. kwh.	Jan.-July	4,237.9	.....	5.8
GAS SALES	th. therms.	Jan.-July	28,750	.....	−0.5
TELEPHONE LINES IN SERVICE	thous.	July	470.5	.....	2.5

p = preliminary.
*From Hawaii County.
*Includes snap beans, cabbage, celery, sweet corn, cucumbers, onions, green peppers, tomatoes, and watermelons.

the islands in July.

The sugar industry continues its lumbering pace. Production of sugar through the first seven months of the year is slightly ahead of last year's figure, but the price of sugar continues to be lower than it was in 1985.

Diversified agriculture, in general, performed well in the first seven months of 1986. The number of people employed by the industry increased by 16 percent over the previous year to 8,800 persons. Anthurium outshipments increased to 968,000 dozens during January to July, an increase of 20 percent over the same period of 1985. Vegetables and melons also did well through July, increasing production to 42 million pounds. However, because of a storm that passed the state earlier in the year, output of papayas through the first seven months of 1986 declined 6 percent to 28 million pounds.

The livestock industry continued its sluggish performance. Beef production declined to 19 million pounds through the first seven months of the year, and the average farm price of feedlot beef rose to 79 cents per pound in July from 76 cents per pound in June. Hog farmers fared slightly better with production increasing to 3.6 million pounds and prices remaining stable.

In general, the Hawaiian economy appears to be continuing its steady upward trend. Gross business receipts for the state rose to $13.2 billion through the period January to June 1986. This represents a 6-percent increase over the same period last year. Kauai had the greatest gains with a 27-percent increase in gross business receipts over the first six months of 1985.

Tax collections were also higher. Between January and July 1986, state tax collections increased by 13 percent to $968 million. The largest increase in tax collections occurred on Kauai, which saw an increase in tax revenues of 45 percent to $26 million in the first seven months of the year.

The healthy economy is also indicated by employment figures. The civilian labor force grew to 504,000 persons in july and the number of persons employed rose to 479,000 persons. In contrast, the number of unemployed persons declined to 25,000 persons. As a result, the unemployment rate declined to 4.9 percent in July, the lowest unemployment rate since March 1985. Similarly, the number of persons collecting unemployment insurance declined in July to 9,257 claims, and cumulative payments for unemployment insurance benefits through the first seven months of 1986 stood 15 percent lower than last year.

THE LONG-TERM SURVIVAL OF HAWAII'S SUGAR INDUSTRY

Having recently celebrated its 150th anniversary, the question facing the sugar industry is: How much longer will it last in Hawaii? While it might very well last another 150 years, the sugar industry in Hawaii has been diminishing in recent years. From a peak of 255,000 acres in the 1930s, sugarcane acreage fell to approximately 185,000 acres today. Meanwhile, after reaching 56,000 jobs in 1928 Hawaii's sugar industry last year provided only 7,550 jobs in the fields and factories, accounting for only 1.6 percent of the total jobs in the state.

What explains these trends? Besides high labor costs, the sugar industry in Hawaii faces competition from foreign sugar producers, and perhaps more importantly, from corn sweeteners.

Corn sweeteners are the generic names for dextrose, glucose and high fructose corn syrup (HFCS). Introduced commercially in the late 1960s, these sweeteners have rapidly increased their share of the caloric sweetener market. The turning point occurred in 1985 when per-capita consumption of corn sweeteners, for the first time, surpassed that of refined sugar. Last year, more than 43 pounds of HFCS was consumed per person in the U.S.

Since it is less costly to make sweeteners from corn than from cane or beets, HFCS is expected to continue its inroads in the sweetener market. Worse yet, scientists are working to develop inexpensive ways to crystallize corn sweeteners, which would further erode the market for cane sugar.

Besides caloric sweeteners, the sugar industry is also facing competition from low-calorie sweeteners such as saccharin and aspartame. U.S. consumption of these sweeteners rose steadily from 6 pounds in 1975 to 17 pounds per capita in 1985.

The availability of surplus sugar in the world market has also accentuated the plight of domestic sugar producers. At present, over 40 countries around the world produce around 100 million tons of sugar per year. Surplus sugar not domestically consumed or traded, roughly 20 million tons a year, is dumped on the so-called "world market." Prices in this market bear no relation to production costs, and fluctuate according to available supply. In 1974, the average world sugar price went as high as 30 cents per pound. Last year, it fell as low as 4 cents a pound.

The volatility of world sugar prices imposes a great threat to sugar produc-

business activity in hawaii [cont.]

Series		Unit	Period	Number	Percent Change preceding period	Percent Change year ago
CONSTRUCTION PUT IN PLACE						
STATE		thous. $	Jan.-June	877,158	.....	42.4
Oahu		thous. $	Jan.-June	761,879	.....	44.2
Maui County		thous. $	Jan.-June	46,889	.....	40.6
Hawaii		thous. $	Jan.-June	48,439	.....	20.2
Kauai		thous. $	Jan.-June	19,951	.....	44.2
HONOLULU CONSTRUCTION COST INDEXES						
SINGLE FAMILY		1967 = 100	August	371.2	0.5	3.8
HIGH-RISE		1967 = 100	August	387.5	0.7	3.7
PRIVATE PERMITS AUTHORIZED						
STATE:	RESIDENTIAL	thous. $	January	57,805	.....	75.9
	Single Family Units	number	January	267	.....	14.6
	Multiple Family Units	number	January	492	.....	154.9
	NONRESIDENTIAL	thous. $	January	53,941	.....	136.1
OAHU:	RESIDENTIAL	thous. $	Jan.-July	199,790	.....	14.9
	Single Family Units	number	Jan.-July	1,123	.....	−7.2
	Multiple Family Units	number	Jan.-July	1,646	.....	25.6
	NONRESIDENTIAL	thous. $	Jan.-July	126,073	.....	42.7
MAUI CO.:	RESIDENTIAL	thous. $	January	6,801	.....	99.0
	Single Family Units	number	January	66	.....	69.2
	Multiple Family Units	number	January	16	.....	77.8
	NONRESIDENTIAL	thous. $	January	3,302	.....	134.5
HAWAII:	RESIDENTIAL	thous. $	Jan.-July	39,239	.....	−28.9
	Single Family Units	number	Jan.-July	657	.....	16.9
	Multiple Family Units	number	Jan.-July	12	.....	−91.3
	NONRESIDENTIAL	thous. $	Jan.-July	143,593	.....	517.3
KAUAI:	RESIDENTIAL	thous. $	Jan.-July	23,402	.....	−10.1
	Single Family Units	number	Jan.-July	231	.....	6.9
	Multiple Family Units	number	Jan.-July	0	.....	−100.0
	NONRESIDENTIAL	thous. $	Jan.-July	41,499	.....	316.9
PUBLIC CONTRACTS AWARDED						
TOTAL GOVERNMENT PROJECTS:						
STATE		thous. $	Jan.-July	258,799	.....	96.2
Oahu		thous. $	Jan.-July	202,058	.....	129.0
Maui County		thous. $	Jan.-July	31,995	.....	28.7
Hawaii		thous. $	Jan.-July	18,716	.....	84.8
Kauai		thous. $	Jan.-July	6,012	.....	−30.9
BY LEVEL OF GOVERNMENT:						
Federal		thous. $	Jan.-July	33,377	.....	40.5
State		thous. $	Jan.-July	150,008	.....	193.1
County		thous. $	Jan.-July	75,395	.....	32.3
REAL ESTATE RESALES						
STATE:	Single Family	number	Jan.-July	1,714	.....	18.9
	Average Price	dollars	Jan.-July	182,345	.....	9.4
	Condominium	number	Jan.-July	2,179	.....	15.2
	Average Price	dollars	Jan.-July	110,110	.....	5.5
OAHU:	Single Family	number	Jan.-July	1,144	.....	7.8
	Average Price	dollars	Jan.-July	206,234	.....	12.9
	Condominium	number	Jan.-July	1,651	.....	7.3
	Average Price	dollars	Jan.-July	104,707	.....	4.5
MAUI CO.:	Single Family	number	Jan.-July	219	.....	58.7
	Average Price	dollars	Jan.-July	172,778	.....	14.8
	Condominium	number	Jan.-July	357	.....	43.4
	Average Price	dollars	Jan.-July	143,057	.....	11.6
HAWAII:	Single Family	number	Jan.-July	275	.....	34.1
	Average Price	dollars	Jan.-July	100,521	.....	2.2
	Condominium	number	Jan.-July	78	.....	36.8
	Average Price	dollars	Jan.-July	90,474	.....	−6.2
KAUAI:	Single Family	number	Jan.-July	76	.....	105.4
	Average Price	dollars	Jan.-July	146,401	.....	1.9
	Condominium	number	Jan.-July	93	.....	93.8
	Average Price	dollars	Jan.-July	96,008	.....	−20.3

p = preliminary.

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population in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
POPULATION					
STATE:					
Total De Facto Population	thous.	July 1, 1985	1,152.0p	.....	1.1
Total Resident Population	thous.	July 1, 1985	1,053.9p	.....	1.6
OAHU:					
Total De Facto Population	thous.	July 1, 1985	865.1p	.....	1.0
Total Resident Population	thous.	July 1, 1985	814.6p	.....	1.5
MAUI COUNTY:					
Total De Facto Population	thous.	July 1, 1985	115.5p	.....	0.5
Total Resident Population	thous.	July 1, 1985	85.3p	.....	2.1
HAWAII:					
Total De Facto Population	thous.	July 1, 1985	115.8p	.....	2.1
Total Resident Population	thous.	July 1, 1985	109.2p	.....	1.9
KAUAI:					
Total De Facto Population	thous.	July 1, 1985	55.6p	.....	1.8
Total Resident Population	thous.	July 1, 1985	44.8p	.....	1.4
CIVILIAN RESIDENT POPULATION:					
STATE	thous.	July 1, 1985	997.5p	.....	1.8
MILITARY PERSONNEL:					
STATE	number	July 1, 1985	58,005p	.....	−4.6
Ashore	number	July 1, 1985	53,848p	.....	−4.4
Afloat	number	July 1, 1985	4,157p	.....	−7.3
CIVILIAN MILITARY DEPENDENTS	number	July 1, 1985	64,281p	.....	−4.2
FOREIGN IMMIGRATION[1]	number	Jan.-Aug.	3,931	.....	3.4

p = preliminary.
[1]Includes only those entering Honolulu ports and does not include status changes.

income in hawaii

INCOME					
TOTAL PERSONAL INCOME**	mil. $	1st Qtr.	14,786p	1.0	5.1
EMPLOYMENT INCOME[1]	mil. $	1st Qtr.	10,858p	1.0	6.5
Manufacturing	mil. $	1st Qtr.	502p	−1.2	8.2
Construction & Mining	mil. $	1st Qtr.	625p	−3.0	16.0
Wholesale	mil. $	1st Qtr.	460p	0.4	7.7
Retail	mil. $	1st Qtr.	1,200p	1.0	2.9
Finance, Ins., & Real Estate	mil. $	1st Qtr.	755p	3.7	10.7
Trans., Comm., & Util.	mil. $	1st Qtr.	962p	1.8	6.9
Services	mil. $	1st Qtr.	2,502p	1.3	8.0
Farm & Other	mil. $	1st Qtr.	331p	−1.2	5.4
Federal Civilian	mil. $	1st Qtr.	960p	0.1	0.3
Federal Military	mil. $	1st Qtr.	1,335p	0.5	3.6
State & Local	mil. $	1st Qtr.	1,227p	2.9	7.5
PROPERTY INCOME (Dividends, Interest, & Rent)	mil. $	1st Qtr.	2,732p	0.8	1.1
TRANSFER PAYMENTS (1,954) minus Personal Contributions for Social Insurance (758)	mil. $	1st Qtr.	1,196p	2.3	2.5
PER CAPITA PERSONAL INCOME:					
STATE	dollars	1984	13,042	.....	5.6
Oahu	dollars	1984	13,709	.....	5.7
Maui County	dollars	1984	11,611	.....	5.9
Hawaii	dollars	1984	9,998	.....	5.2
Kauai	dollars	1984	10,564	.....	6.9

**Total personal income and all components are seasonally adjusted at annual rates.
[1]Includes wage and salary disbursements, proprietors' income, and other labor income.
p = preliminary.

AWAIIAN BANK

ers all over the world. As a result, most countries adopt some form of price-stabilization program to insulate themselves from erratic fluctuations of sugar prices in the world market. One example involves long-term contracts between producing and consuming countries. Some governments guarantee a price floor to their domestic producers. Any resulting surplus sugar is then sold in the world market for whatever price it can fetch.

The United States has instituted a variety of price-support programs. From 1934 to 1974, domestic production controls and country-by-country import quotas insured a fair price for domestic producers and consumers. This program produced stability for the domestic sugar industry; but, Congress terminated the program in 1974 by refusing to renew the 1934 Sugar Act.

This directly exposed sugar producers to the world surplus sugar market. As surplus sugar was dumped in the newly-opened U.S. market, prices received by domestic sugar producers dropped rapidly. From a record $685 million in 1974, the manufactured value of Hawaii's sugar plummeted to $252 million in 1976.

Faced with the prospect of losing the domestic sugar industry, President Carter decided to subsidize the industry through a presidential order in 1977. For the remainder of his term, the domestic sugar industry was partly insulated from foreign competition by a combination of high import fees and duties.

However, domestic sugar producers still suffered huge losses. In 1981, Hawaii's sugar industry alone lost almost $90 million. To help the domestic sugar industry, Congress voted to include sugar in the Farm Act in 1981. The Act's sugar provision established a loan fund where a producer unable to sell his crop was eligible for a loan using his crop as collateral. The loan rate was based on an estimated cost of production, and is currently set at 18 cents per pound. This price-support loan program, together with country import quotas, established, in effect, a floor under the price of domestically produced sugar. The Farm Act was extended last year for another five years.

While federal legislation has helped to stabilize the domestic sugar market, from now on, the sugar industry cannot rely on this type of support for at least two reasons. First, price-support legislation is now up for reconsideration every five years, a more frequent interval than in the past. As a result, legislative support becomes unpredictable, shifting with the prevailing political

mood.

Second, corn-growing states as well as large sugar-using companies will exert increasing political pressures for larger import quotas of cheaper foreign sugar. While sugar-using companies enjoy lower sugar prices, corn-producing states will enjoy a greater share of the caloric sweetener market. Since corn producers have lower costs of production, they can tolerate larger sugar imports than domestic sugar producers.

In the long run, the survival of the domestic sugar industry will depend ultimately on economics and diversification. Already, the industry is taking steps to increase yields through drip irrigation. Yields of tons of sugar-per-acre (TSA) have been rising at an average rate of 1 percent a year during the last 50 years. During the last six years, with the introduction of drip irrigation, TSA has increased at an average rate of 3 percent a year. While all plantations showed record average yields of 12 TSA in 1984, two plantations achieved yields exceeding 21 TSA. Thus, the opportunity exists for further increases in TSA for Hawaiian sugar producers. Also, the HSPA is testing more high yield sugar varieties to be distributed to plantations in the near future.

Increases in sugar yields have reduced the cost of producing sugar in Hawaii. The average cost of producing a pound of sugar declined by 10 percent since 1982 to approximately 16 cents per pound in 1985. Another factor is the decline in labor costs. The unit cost of personal services, i.e., wages and employment benefits, has declined by 4 percent in the last three years. Much of the savings was due to the cooperation of the labor unions.

Continuing efforts are also being made to develop new markets and expand established markets for sugar and its by-products. In 1984, Hawaii's sugar plantations earned $10.3 million in revenues from sales of 303,000 tons of molasses. Expanded uses for molasses are under research. Sale of bagasse for electricity generation was responsible for another $12 million in revenues in 1984. Power generated from burning bagasse accounted for about 10 percent of electricity consumed in Hawaii. Plans are under way to produce particle board using bagasse, and to use cane fiber for making paper.

Hamakua Sugar is building a cattle feedlot facility on the Big Island. Pelletized bagasse and discarded sugar leaves are used as a fiber component in the cattle's diet. Other potential by-products include industrial compounds and chemicals, some of which can be

employment and jobs in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
EMPLOYMENT					
STATE:					
Civilian Labor Force	thous.	July	503.8p	0.3	3.4
Employment	thous.	July	479.2p	1.0	4.2
Unemployment	thous.	July	24.6p	−11.7	−9.4
Unemployment Rate	percent	July	4.9p	−10.9	−12.5
OAHU:					
Civilian Labor Force	thous.	July	377.0p	0.1	2.1
Employment	thous.	July	360.6p	0.6	2.8
Unemployment	thous.	July	16.4p	−9.4	−10.6
Unemployment Rate	percent	July	4.3p	−10.4	−14.0
MAUI COUNTY:					
Civilian Labor Force	thous.	July	49.5p	1.1	6.8
Employment	thous.	July	47.0p	2.1	7.7
Unemployment	thous.	July	2.5p	−10.7	−5.7
Unemployment Rate	percent	July	5.0p	−13.8	−12.3
HAWAII:					
Civilian Labor Force	thous.	July	53.8p	0.3	9.0
Employment	thous.	July	49.5p	2.3	10.7
Unemployment	thous.	July	4.3p	−18.1	−7.5
Unemployment Rate	percent	July	8.0p	−18.4	−15.8
KAUAI:					
Civilian Labor Force	thous.	July	23.6p	1.3	5.6
Employment	thous.	July	22.2p	2.3	6.5
Unemployment	thous.	July	1.4p	−12.5	−6.7
Unemployment Rate	percent	July	6.0p	−13.0	−9.1
JOB COUNT BY INDUSTRY					
TOTAL JOBS—STATE	thous.	July	483.7p	1.1	4.6
SUGAR (Mill and Field)	thous.	July	7.5p	−0.7	−2.6
PINEAPPLE (Cannery and Field)	thous.	July	5.8p	9.4	7.4
DIVERSIFIED MANUFACTURING					
(Excluding Sugar and Pineapple)	thous.	July	16.6p	0.0	5.4
Durable Goods	thous.	July	3.5p	1.4	11.1
Non-Durable Goods	thous.	July	13.1p	−0.8	3.6
Apparel and Textiles	thous.	July	3.5p	−1.4	15.0
DIVERSIFIED AGRICULTURE					
(Excluding Sugar And Pineapple, but including Agricultural Self-Employed)	thous.	July	8.8p	5.4	15.9
CONTRACT CONSTRUCTION	thous.	July	17.5p	4.5	−6.4
TRANSPORTATION	thous.	July	24 4p	−0.6	7.7
COMMUNICATION	thous.	July	7.1p	−0.7	−4.1
UTILITIES	thous.	July	2.5p	0.0	2.0
RETAIL TRADE	thous.	July	98.9p	1.1	4.6
WHOLESALE TRADE	thous.	July	19.7p	−0.3	2.1
FINANCE, INSURANCE AND REAL ESTATE	thous.	July	32.9p	0.6	2.0
HOTEL SERVICES—STATE	thous.	July	28.1p	0.7	−1.1
Oahu	thous.	July	16.3p	−0.3	1.6
Maui County	thous.	July	6.2p	3.3	−3.9
Hawaii	thous.	July	3.4p	0.0	−9.3
Kauai	thous.	July	2.2p	−2.2	0.0
OTHER SERVICES	thous.	July	85.2p	0.1	5.9
FEDERAL GOVERNMENT	thous.	July	31.9p	−0.2	−2.7
Civilian Agencies	thous.	July	11.6p	0.0	−1.7
Defense Department	thous.	July	20.4p	−0.2	−3.6
STATE GOVERNMENT	thous.	July	45.7p	−6.8	3.5
COUNTY GOVERNMENT	thous.	July	14.7p	14.9	−10.1
NON-AGRICULTURE SELF-EMPLOYED	thous.	July	36.7p	11.9	36.2
UNEMPLOYMENT INSURANCE					
INSURED UNEMPLOYMENT (Weekly Average)	number	July	9,257	−10.2	−18.7
INTRASTATE INITIAL CLAIMS	number	Jan.-July	38,096	.....	−10.2
INTERSTATE INITIAL CLAIMS	number	Jan.-July	2,308	.....	5.3
UNEMPLOYMENT INSURANCE BENEFITS	thous. $	Jan.-July	35,252	.....	−14.5

p = preliminary.

public assistance in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
PUBLIC ASSISTANCE					
INCOME MAINTENANCE:					
Recipients[1]	no./persons	July	53,567	−1.4	−8.1
Payments	thous. $	Jan.-July	54,208	.....	−5.5
MEDICAL ASSISTANCE:					
Recipients[1]	no./patients	August	55,303	11.7	17.3
Payments	thous. $	Jan.-Aug.	108,320	.....	−7.9
FOOD STAMPS:					
Recipients[1]	no./persons	June	90,923	−0.7	−6.5
Payments	thous. $	Jan.-June	44,608	.....	−4.0
SERVICES:					
Recipients[1]	no./cases	2nd Qtr.	8,330	6.9	6.9
Payments	thous. $	1st Qtr.	4,246	.....	19.1

[1]Count of recipients is duplicated. A person may be counted in each category.

banking and finance in hawaii

FINANCE					
COMMERCIAL BANK DEPOSITS:					
STATE:					
Total Deposits	mil. $	July	7,782.6	0.3	12.3
Debits To Demand Deposits	mil. $	Jan.-July	60,515.9	.....	11.5
OAHU:					
Total Deposits	mil. $	July	6,431.8	−0.7	11.7
Debits To Demand Deposits	mil. $	Jan.-July	54,763.6	.....	11.2
MAUI COUNTY:					
Total Deposits	mil. $	July	492.5	0.9	12.0
Debits To Demand Deposits	mil. $	Jan.-July	2,474.5	.....	15.4
HAWAII:					
Total Deposits	mil. $	July	599.0	10.7	21.1
Debits To Demand Deposits	mil. $	Jan.-July	2,258.7	.....	10.8
KAUAI:					
Total Deposits	mil. $	July	259.3	0.8	7.4
Debits To Demand Deposits	mil. $	Jan.-July	1,019.1	.....	26.0
BANK LOANS OUTSTANDING—STATE:	mil. $	2nd Qtr.	4,629.1	−1.9	5.1
Real Estate	mil. $	2nd Qtr.	1,886.8	−0.5	7.0
Consumer	mil. $	2nd Qtr.	1,063.2	1.8	8.3
Commercial & Industrial	mil. $	2nd Qtr.	1,338.3	−1.7	1.2
Other	mil. $	2nd Qtr.	340.8	−18.3	1.3
CONVENTIONAL HOME MORTGAGE RATES: HONOLULU SAVINGS & LOAN ASSOCIATIONS:[1]	percent	July	10.2	−1.9	−14.3
TOTAL DEPOSITS	mil. $	June	3,579.2	0.3	−1.3
TOTAL LOANS	mil. $	June	116.4	11.1	NA
MORTGAGE LOANS	mil. $	June	103.7	12.4	115.0
TAX COLLECTIONS:[2]					
STATE	thous. $	Jan.-July	968,120	.....	13.4
Oahu	thous. $	Jan.-July	828,474	.....	12.0
Maui County	thous. $	Jan.-July	59,514	.....	19.1
Hawaii	thous. $	Jan.-July	53,942	.....	16.2
Kauai	thous. $	Jan.-July	26,252	.....	45.3

[1]Includes Hawaii and Guam. Reporting categories changed in July, 1985.
[2]Taxes collected by the State Department of Taxation. Excludes property taxes which were formerly collected by the State but are now collected by the Counties.

used as substitute raw materials for the petrochemical industry.

However, with cheap foreign labor and abundant surplus sugar in the world market, uses for marginal sugar lands must also be found to enhance sugar-industry revenues. Efforts should be made to expand established export-oriented crops such as macadamia nuts, papaya, pineapple, coffee, and guava. In 1984, these crops had a combined value of $130 million.

Attempts are currently being made to develop other crops such as alfalfa, tea, potatoes, and cocoa. Recently, Amfac announced plans to grow alfalfa on about 100 acres of former sugar land on Oahu. If the venture proves profitable, Amfac plans to expand its alfalfa plantings to as many as 3,000 acres. Alfalfa is used by dairymen to feed their cattle.

Also, while A&B and Lipton Tea are testing tea plantings at McBryde Sugar Co., Amfac recently joined Hershey Foods and Kakela Enterprises in forming the Hawaii Cocoa Joint Venture to explore the viability of a cocoa-bean industry in Hawaii. If cocoa can be produced profitably in Hawaii, the industry can use up to 15,000 acres of former sugar lands and create more than 1,800 jobs for Hawaii's residents.

Seeking alternative uses for sugar land is a logical step to take for sugar producers in Hawaii. Continued support, however, is needed from both the federal and state governments to insure a smooth transition. Federal legislation such as the Farm Act is essential to give domestic sugar producers sufficient time to adjust to the lower sugar price environment. State government, on the other hand, should liberalize its land use restrictions to allow sugar companies to diversify their revenue base through the development of alternative urban uses.

The sugar industry in Hawaii will be facing some crucial decisions in the years ahead. Faced with increasing domestic and foreign competition, the industry will undoubtedly become leaner in the future as plantations seek a broader range of sugar by-products and alternate uses for sugar lands. Fortunately, the growth of diversified agriculture should provide a strong demand for currently unproductive sugar lands. As sugar companies organize themselves to face the challenges of the future, the industry will most likely see a far greater diversification of products, including sugar, sugar by-products, and alternative crops. The extent to which diversification does occur will depend on the ability of individual companies to exploit newly emerging market opportunities to diversify their products.

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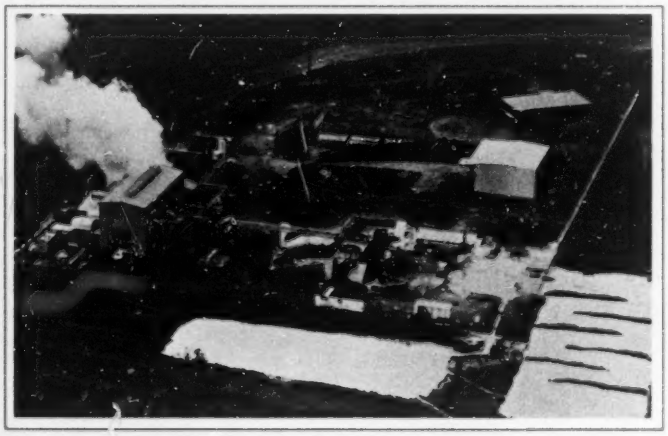

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